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CHEMIST AND DRUGGIST

ESTABLISHED 1859

THE WEEKLY NEWSPAPER FOR PHARMACY
and all sections of the drug, pharmaceutical,
fine chemical, cosmetic, and allied industries

*Official organ of the Pharmaceutical Society of Ireland
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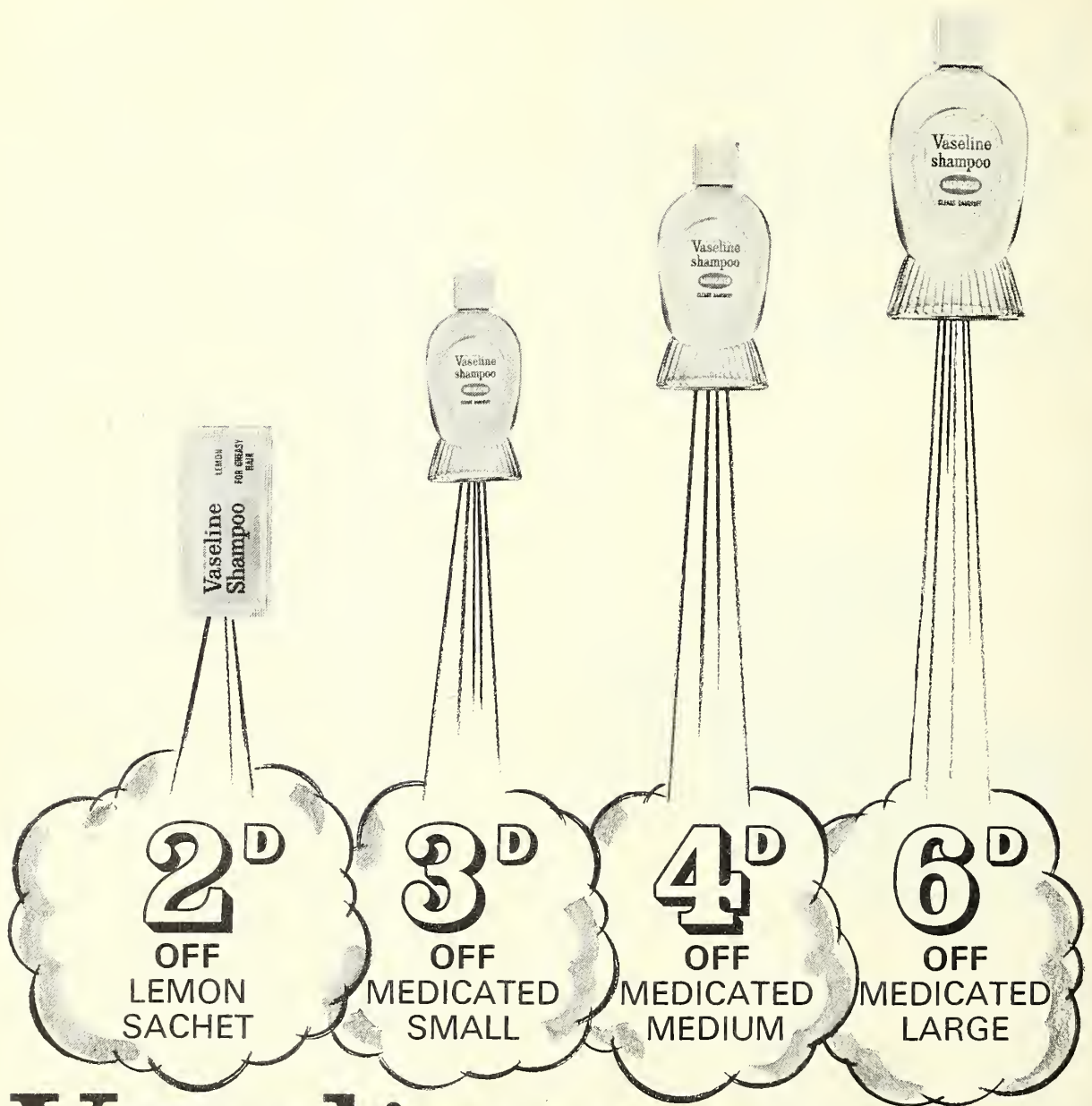
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C & D

CHEMIST AND DRUGGIST

Volume 185

APRIL 2, 1966

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“Dumped” Tablets

A MANUFACTURER OFFERS £100 REWARD

A REWARD of £100 is being offered by Nicholas Products, Ltd., Slough, Bucks, for information leading to the arrest of the thieves who abandoned several thousand “Microfined” Aspro tablets in a council tip near housing estates at Bracknell, Berks.

The tablets were found in the possession of children who used the land adjoining the tip as a playground. Inquiries have shown that six days elapsed between the time one of the children's parents took some of the tablets to the police and Messrs. Nicholas were informed. The company understands that the police were wrongly under the impression that the tablets were old stock being dumped. “This would not have been possible since Nicholas Products, Ltd., are recalling all old stocks under careful supervision,” it is stated.

Fire at a Laboratory

EQUIPMENT LOST

A FIRE which broke out in the metabolic research unit of CIBA Laboratories, Ltd., Horsham, Sussex, at about 11 p.m. on March 28 gutted one biochemistry laboratory. All equipment in that laboratory was destroyed and smoke and water damage was caused in the research library and several adjoining laboratories. Moisture-sensitive equipment in the laboratories suffered damage but it is expected that work will be resumed “in a day or two.” A tentative estimate put the cost of the fire at several thousand pounds. A spokesman for the company said that but for the prompt and efficient action of the firemen who attended with five or six appliances damage to the unit opened on May 12, 1965 (see *C. & D.*, May 22, 1965, p. 517) would have been much more severe.

Misuse of Prescriptions

“NO LESSENING” IN LONDON AREA

STOLEN prescription forms, fraud and forgery continue on the increase and the Drugs (Prevention of Misuse) Act, 1964, seems to have made no impression whatever on the problem so far as Executive Councils are concerned, states Mr. A. Aldington (chairman, Inner London Executive Council) in his annual report. Many are alarmed at the growth of the illicit traffic, and urgent representations have been made to the Ministry of Health and to the Home Office to strengthen the law. The publication of the Brain report

showed up the necessity for action to deal with the misuse of heroin and cocaine but “it did not deal with the much wider and potentially almost as dangerous a trend, the growing misuse of amphetamines and barbiturates.” Mr. Aldington welcomes the co-operation of doctors and pharmacists in doing all they can to prevent the theft of prescription forms and to detect forgeries. There has been an increase of over 20 per cent. in the number and in the cost of prescriptions since the removal of patients' charges. In the first eleven months of the current financial year, cost to the Council of pharmaceutical services was £2,600,000 greater than in the corresponding eleven months of the previous year and about £1½ millions of that is accounted for by patients' charges.

Dangers of Poisons

R.O.S.P.A. PUBLICITY CAMPAIGN

THE Royal Society for the Prevention of Accidents has announced details of its April-June “Lock Away Poisons” campaign. Main features are a full-colour poster giving detailed causes of the 1,400 poisoning accidents in a year, and a series of leaflets warning against

leaving poisons around the home. One of the leaflets (on how to prevent medicinal poisoning accidents) advises the use of a locked medicine chest, careful measurement of prescribed doses, and reserving one shelf of the chest for external-use preparations and disinfectants. On the disposal of unused medicines the leaflet says that opened or unopened “dangerous” drugs should be destroyed by fire or by pouring down the w.c. according to their nature. Other unopened packs “may be transferred to a suitable hospital, normally through the medical officer of health. They may also be given to district nurses, midwives, etc., for return in this way.” Notes for R.O.S.P.A. lecturers, on the other hand, advise destroying unused drugs or returning them to the pharmacist. [It is understood that the leaflets were printed before it was suggested to R.O.S.P.A. that drugs should be returned to the pharmacist. Future literature will contain advice similar to that contained in the lecture notes—EDITOR.]

Photographic Equipment

SALES IN JULY-SEPTEMBER 1965

IN the third quarter of 1965 the recorded value of deliveries of photographic equipment including sensitised materials was 6 per cent. higher than a year earlier; home and export deliveries were respectively 7 per cent. and 5 per cent. greater, according to the Board of Trade's *Business Monitor*. Home deliveries of miniature cameras in the third quarter continued well above the level of a year earlier and there were increased home deliveries of cine cameras and of photographic



N.P.U.'s NEW HOME: An artist's impression of Mallinson House, Southgate Circus, London, N.14, in which the National Pharmaceutical Union group of organisations are now housed.

[Courtesy, Watney Mann Property Co., Ltd.]

apparatus other than cameras and projectors. On the export side deliveries were lower for most categories compared with a year earlier but increases were recorded for non-standard cine cameras and for apparatus other than cameras and projectors. Out of a total delivery of £22.5 millions in the quarter £7.89 millions went for export. The total value for cameras £796,000 plus £86,000 for cine; for ordinary films £7.78 millions and for sensitised paper, £4.75 millions.

Chemists' Retail Sales

BOARD OF TRADE STATISTICS

THE index of retail sales by chemists and photographic dealers in January was 109 (average monthly sales in 1961=100), an increase of 6 per cent. over the same period a year earlier. Figures recently issued by the Board of Trade also reveal the following indices for the month:—

Independent retailers 108 (+ 5 per cent.)

Multiple retailers 111 (+ 9 per cent.)

Co-operative societies 104 (+ 6 per cent.)

The figures do not allow for receipts under the National Health Service.

Aerosol Filling in 1965

SIXTEEN MILLIONS MORE THAN IN 1964

THE number of aerosols filled by members of the British Aerosol Manufacturers' Association in their own plants during 1965 exceeded 107 million units. Based on those collected statistics the executive committee have estimated that a total of 128 million units were filled by United Kingdom members and non-members during the year.

IRISH CO-OPERATIVE BUYING

250 members needed for new unit

A MEETING of community pharmacists from all parts of the Republic unanimously decided at a meeting in Dublin on March 20 to form a co-operative buying unit to be known as the United Pharmacists' Co-op., Ltd. Purpose of the organisation is to enable pharmacists to buy "non-ethical" goods at more competitive prices and in quantities to suit the demands of the individual pharmacists. The committee recently appointed to investigate the position (see *C. & D.*, March 5, p. 237) recommended establishing a co-operative wholesale society without delay.

The organisation, which will be legally registered, will have a minimum membership of 250 and a share capital of not less than £250,000. Each member will be required to subscribe £100 and to purchase a minimum of £10 worth of goods weekly. The goods will be sold on a mark-up of 5 per cent. to cover overheads. It is hoped that a management committee will have been appointed by June 1. Permission was given to the acting committee to accept members and formally to register the organisation.

Membership is open to all proprietors of community pharmacies and an invitation to join is being sent to all pharmacists on the Irish Drug Association list. A free delivery service will be operated to pharmacists within fifty

against 112 millions in 1964. An analysis of the 1965 total estimates fillings of insecticide products (in millions) at 18; air fresheners, 14; shaving lather, 2; hair sprays, etc., 44; Colognes and perfumes, 2.4; personal deodorants, 2.5 and medicinal products, 5.

Acts of Self-poisoning

FIGURES FOR EDINBURGH GIVEN

EVERY year one teenage girl in every 600, and one adult in every 1,000 of Edinburgh's population indulges in self-poisoning, said Dr. H. Matthew (poison centre, Edinburgh Royal Infirmary) when he spoke at the silver jubilee conference of the Scottish Accident Prevention Council in Dundee on March 16. Dr. Matthew said that self-poisoning was an impulsive act and self-destruction was not in the mind, although death could result by mistakes in dosage. It was the ease with which drugs like aspirin could be bought that resulted in their misuse and he deprecated their sale in such enormous quantities. In Scotland there was a high proportion (30 per cent.) of domestic accidents due to poisoning or gassing. The pharmaceutical industry could help by not bringing out products in colours that were so attractive to children.

Births and Deaths, 1964

MORE MEN DIE OF LUNG CANCER

MALE deaths from lung cancer in England and Wales totalled a record 21,476 in 1964, according to final statistics published in the part I (medical tables) of the Registrar General's Statistical Review of England and Wales

miles of Dublin. Outside that distance delivery will be made where pharmacists agreed to pool orders to make such delivery economic.

Mr. P. O'Briain, who presided, said that, of the country's 1,300 pharmacists, 470 resided within the fifty miles radius. Mr. J. P. Daly (secretary) said that a number of wholesalers had been written to, inviting them to operate the proposed scheme. All had declined to do so.

Mr. O'Briain told the meeting that the organisation had been assured of being able to purchase its requirements at the keenest possible price and had been offered suitable premises for a central dépôt. It was intended to offer an attractive salary to the person appointed as manager. Members desiring to transfer shares could do so only to people approved by the management committee. Mr. O'Briain told a questioner that the possibility of including veterinary products in the supply list could be investigated. The list would be revised in the light of demand. It was hoped eventually to have their own trade brand.

Persons wishing to join the organisation should write to John O'Reilly, M.P.S.I., Monastery Road, Clondalkin, Dublin, or to Associated Pharmacies, 149 Drumcondra Road, Dublin. Cheques should be made payable to Associated Pharmacies.

for the year 1964 (H.M. Stationery Office, price 36s.). Total deaths from cancer rose by 2,282 over the 1963 figure to 104,698 (56,247 males and 48,451 females), accounting for 19 per cent. of all deaths. There were 14,544 stillbirths (16.3 per 1,000 births) the lowest since records were first kept in 1927. Infant mortality rate at 19.9 per 1,000 live births was also the lowest recorded.

Metric Switchover

JOINT COMMITTEE APPOINTED

A STANDING joint committee of thirteen members to promote the switch to metric weights and measures throughout British industry has been set up by the Ministry of Technology. Chairman, Mr. A. H. A. Wynn, who is in charge of the Ministry's standard division, stated on March 29 that the committee's terms of reference were "to encourage, assist, and review the progressive adoption within British industry of the metric system of weights and measures." Initially, the committee is concerned with setting priorities, applying the system first to industry and ensuring that "bottlenecks" are avoided and obstacles overcome during the transition stage.

IRISH NEWS

THE REPUBLIC

Illegal Sales

RECENT CASES

DEFENDING solicitor for Mr. L. Burke, M.P.S.I., Castle Street, Dalkey, co. Dublin, summoned before District Justice Kennedy in Dublin District Court on March 14 for breaches of pharmacy regulations, pleaded that his client had been taken in. An inspector of the Pharmaceutical Society of Ireland gave evidence of having purchased a scheduled poison from an unqualified assistant during the absence of Mr. Burke. Mr. Burke was fined a total of £4 on two summonses under the Sale of Poisons' Act, 1870, and £2 under section 17 of the Pharmacy Amendment Act, 1890. £4 11s. expenses and £3 3s. costs were allowed. His solicitor gave an undertaking that the pharmacy would be properly supervised in future. At Killarney, co. Kerry, Court the following day Mr. D. Sheahan, M.P.S.I., Main Street, Killarney, was summoned by the Society under section 2 of the Poisons Act, 1870, and section 17 of the Pharmacy Amendment Act, 1890, for the sale of a poison by an unqualified assistant during his absence, to a agent of the Society. The first summons was dismissed on the technical ground that the copy of the summons served on Mr. Sheahan had not been signed by the Court clerk. The Justice convicted on the other count and imposed a fine of £1, allowing £8 8s. expenses and £5 5s. costs.

IRISH BREVITIES

THE NORTH

PRESCRIPTIONS dispensed in Northern Ireland during December 1965 numbered 827,331 (542,631 forms). Total cost was £491,018 an average of 142.44d. per prescription.

NEWS IN BRIEF

THE British approved name for - amino-5-chloro-*N*-(2-diethylamino-ethyl)-2-methoxybenzamide (of which Primperan is the hydrochloride) is metoclopramide [corrected note].

BRITISH Disinfectant Manufacturers' Association have elected Mr. T. R. Auchincloss (Jeyes Group, Ltd.), *Chairman*; Dr. G. C. Gibbons (Domestos, Ltd.), *Vice-chairman*; and Mr. C. A. Pearson (William Pearson, Ltd.), *Treasurer*.

"ADMINISTRATIVE Practice of Hospital Boards in Scotland," the report of a committee set up by the Scottish Health Services Council in 1962 to study the administrative practice of hospital boards and to consider whether any changes were desirable, has recently been published. (H.M. Stationery Office, Edinburgh, price 7s. 6d.)

THE Board of Trade has imposed an anti-dumping duty of £114 per ton on products containing not less than 71 and not more than 76 per cent, by weight of diphenyl ether and not less than 24 and not more than 29 per cent, by weight of diphenyl imported from the United States or from any other country if such imports are found to be "dumped."

PLANS have been completed by the Royal College of Physicians and Lilly Industries, Ltd., for Messrs. Lilly to provide £2,000 annually so that the College can invite to the United Kingdom someone who has made an outstanding contribution to medicine (the Lilly lecturer), who would deliver one lecture at the College, and one or more outside London. The lecturer will also be presented with a commemorative medal.

THE report of *Which?*, published by Consumers' Association, on breath analysers (see *C. & D.*, March 12, p. 244) stated: "So if your reading is anywhere near the line, don't give yourself the benefit of the doubt" [corrected note].

SPORT

GOLF.—WORCESTERSHIRE AND SHROPSHIRE CHEMISTS' GOLFING ASSOCIATION. A match held at Kingston golf club on March 27 had to be abandoned owing to gale force winds, sleet and rain. Of the sixteen competitors, three completed the course and were awarded prizes for that feat. Winner was Mr. Deakin with a net 93. Other players completed varying numbers of holes from one to eleven on what is reported to be one of the highest courses in the country. The organisers hope to re-arrange the contest later.

IRISH CHEMISTS' GOLFING SOCIETY. The president (Mr. B. R. Smith) and the captain (Mr. F. Keen) made their first official appearances on the greens for the start of the Society's new season at Dun Laoghaire on March 23. More than fifty players competed for prizes presented by May Roberts (Ireland), Ltd. Prizes were presented at a dinner in the clubhouse by Mr. T. McAuliffe (a director of the company). **Results:** *Strokes competition*, 1, B. Cullen (18), 65; 2, S. C. Martin (24), 74. *Par competition*, 1, A. Pattison (13), 2 down; 2, M. L. Cashman (10), 4 down. *Best score on first nine holes*, S. Concrey. *Best score on second nine holes*, S. Banks. Next outing is at Baltray on April 20, or prizes donated by P. C. Cahill & Co., Ltd. Intended participants in the annual outing at Ballybunion on May 22-25 should contact the secretary (Mr. J. Foley) immediately.

TOPICAL REFLECTIONS

By Xrayser

Looking ahead

We have reached the time of the year when we dare hope that we are emerging from the long tunnel of winter. There are sundry reminders of that, despite Nature's seeming reluctance to accept the fact graciously. Thanks to the arrival of British Summer Time we now face the rigours of the day one hour earlier, and in the same week in which we try to convince ourselves of the enforced merits of a situation which should lead to health, wealth and wisdom, we are beguiled with the arrival of THE CHEMIST AND DRUGGIST Photographic Issue. There are many features of great interest and value, not the least of which is the most helpful article on colour photo-finishing (p. 312). The difference between a set of colour prints and a batch of reprints is sometimes most marked, and it is not always an easy task to explain why that should be. The reasons advanced by your contributor, together with the steps necessary to avoid or at least minimise such differences, are of practical help in dealing with inquiries. But so much of the hazard has been removed from photography by the focusing devices and automatic exposure meters that one wonders how it was possible except by the merest chance, to produce good pictures thirty or forty years ago—yet we did. But when, by the exercise of knowledge and experience, aided perhaps by a smile from Dame Fortune, something of pleasing quality was produced, the only praise offered by friends was generally a reference to the fact that the camera must have a good lens. There was no appreciation of composition, or the scheming to secure the effects of side-lighting, or the fact that there was detail in the shadows, or that the cloud effect was carefully studied. The proud photographer was quickly put in his place by the almost invariable reference to the quality of the lens or the camera. One imagines, with the scientific aids of today, that there should be no such thing as a poor picture, for everybody now has a good camera with a good lens, which takes care of everything—except perhaps the choice of subject.

Containers

There has been much discussion of late devoted to the subject of suitable containers for the supply of dispensed medicines, and it is not surprising that, despite our living in a plastics age, glass still plays an important part. From his first day in pharmacy, the apprentice of past years was fully aware that his horizons were bounded by glass in one shape or another, and it is extremely unlikely that he survived his first week in his chosen vocation without his becoming tragically reminded of the fragile nature of that substance. It is of particular interest to the pharmacist, therefore, that a history of glass containers should have been published, and I read your review of the booklet with something of that sense of wonder that we should take glass so much for granted. According to Pliny, the discovery of that most useful material was quite accidental. Some merchants, he wrote, kindled a fire near Ptolemais at a spot where the River Belus casts the fine sand which it brings down. The merchants, according to Pliny, were without the usual means of supporting their cooking vessels, substituting for the purpose logs of nitre, which formed the cargo of their ship. The fire caused a fusing of the nitre and the sand, and hey, presto! as they say in other circles, there was glass, and a whole new world opened up. But there were still older bottles—those described as "wine-bottles old and rent and bound up," which were made from skins. Ingenuity is not the monopoly of the space age.

N.H.S. drug testing

The news that a new drug-testing scheme has been agreed by the Central N.H.S. (Chemist Contractors) Committee and the Pharmaceutical Society (p. 292) is of interest for two reasons. First, it suggests that the operation of a similar scheme in Scotland has been found to be adequate, and secondly, the professional body of pharmacy is becoming more closely associated—as it should be—with the professional practice of pharmacy under the National Health Service.

Yorkshire Pharmacists' Conference

ADVERTISING AND QUALITY CONTROL ISSUES DEBATED

MAIN topics at a one-day conference arranged for West Riding pharmacists and held at Leeds on March 27 were the advertising of medicines and the quality control of drugs. Chairman of the conference (Mr. W. M. Darling, a member of Council of the Pharmaceutical Society) welcomed the seventy pharmacists present and asked MR. W. K. FITCH to present his paper on "The Advertising of Medicines." The paper, said Mr. Fitch, was a revision and an extension of an address he had given to the Bournemouth meeting of the British Pharmaceutical Conference in 1959. He had hoped to say something about the proposed comprehensive health legislation, but nothing had yet been published by the Ministry of Health, though various documents had been issued privately. The attempt to co-ordinate pharmaceutical legislation had been started by the setting up of an interdepartmental working party. The Society was among the 40-50 bodies that had submitted evidence. It had said, "about the manufacture, distribution and advertising of medicines":—

SUBJECT to the maintenance of the self-governing authority of the medical, dental, veterinary and pharmaceutical professions, legislation should provide for the control of medicines being separated from the control of other substances and vested in the Minister of Health, the Secretary of State for Scotland and the Minister of Agriculture, Fisheries and Food, who should have power to make rules dealing, *inter alia*, with the introduction, composition, production, identification, purity, claims, advertising and distribution of substances and preparations used for the prevention or treatment of human or animal ailments.

Monopolies and Responsibilities

If the meeting accepted the point of view that the pharmacist should be recognised as the distributor of medicines, it must accept the responsibilities that went with that recognition. The pharmacist could not have it both ways. "He cannot say that, as the only expert in daily contact with the public on the action and uses of drugs, he must have the monopoly of their sale if he is not prepared to say that this, that, or the other product does not come up to his standards and therefore he will not stock it." Mr Fitch then discussed the volume of the advertising of medicines, quoting figures extracted from "Statistical Review of Press and Television Advertising," published by Legion Information Services, Ltd. In 1938, over £3 millions had been spent in daily, weekly and specialised papers; the expenditure had dropped to £2 millions in 1948 but had doubled in 1958. Another £1.6 millions had been added in 1964. In 1958 television commercials had hit the viewer, and over £5 millions had been spent in that year through that medium. "So if we take Press advertising and T.V. commercials together for 1964, the latest full year

for which figures are available, we find that a total of £11.5 millions was spent. I have no reason to believe that 1965 showed a smaller volume of expenditure."

The figures might be set against the amount spent by the Ministry of Defence, namely £482,000, of which £114,000 went on T.V. advertising, and the amount spent by the Ministry of Health, namely the insignificant sum of £16,000. Of the total amount spent in advertising during 1964 (they amounted to approximately 4 per cent.) aspirin and other headache remedies topped the list. For 1964 they totalled, in value of space in newspapers and time on T.V., £2,376,023. Indigestion remedies came next with nearly £2 millions. Others, described as "unclassified," amounted to about £1½ million. "This is big money and its impact must be substantial."

There was also published a breakdown of advertising by the various companies. In 1938 and 1958 the Aspro organisation had paid out more in Press advertising than any other company. In 1957-58 it was at the top of the list for television advertising but in 1965 took fifth position. Bile Beans, second in the list in 1938, but below the first twenty in 1964-65, was not advertised on television. Sanatogen multi-vitamins came second in Press advertising in 1965 (£219,000) but only about a third of that sum had been spent by the company on T.V. advertising. Phensic came third in Press advertising and second in T.V. advertising in 1965, having spent in total nearly £600,000.

The makers of those remedies, most of them available from supermarkets and hucksters, were coy at divulging their sales figures. But it was not a wild guess to assess their turnover at ten times or more the amount paid out in advertising, or at least £115 millions a year, perhaps nearer £120 millions."

Modern (?) Remedies

After asking what were the constituents of those publicly advertised products, Mr. Fitch mentioned a few of them "to show how closely they are in line with modern pharmacological and therapeutic thought":—Aloes, apiol, buchu, cinchonidine sulphate, copper carbonate, copper sulphate, guaiacol carbonate, jalap, lithium sulphate, pancreatin, papain, potassium nitrate, rhubarb, scammony resin and uva ursi. He went on to mention some constituents "which should never be available except under strict pharmaceutical control":—Aspirin, ephedrine, hexamine, paracetamol, phenacetin, phenolphthalein, phenylephrine, potassium iodide, quinine sulphate, strychnine and vitamin D. If pharmacists were to show, by refusing to stock them, their disapproval of the way in which such products were advertised, then the Society's ability to take action against the manufacturer would be immeasurably strengthened.

Highly relevant to the question was a report by a Commission, presided over by Lord Reith, that had been set up some years ago by the late Hugh Gaitskell to inquire into British advertising. From newspaper comments it appeared that one of the main recommendations was the setting up of a National Consumer Board with the power to check the standards of all advertised products. It was reported that the Commission had examined pharmaceutical advertising in detail and had recommended an entirely new code to control the advertising of medicines. In a book to be published by Hutchinsons in May, the author, Dr. Samuel Bradshaw, had made the following comment:

Most pharmacists would like to see all or most "patent" medicines sold only in a pharmacy and they would justify this restriction on the ground that only a pharmacist (apart from doctors) knows of the dangers of drugs and is therefore able to give sound advice to would-be purchasers and to control the sale of medicines properly. That is true, but as regards the great majority of purchasers of patent medicines in a pharmacy today advice is neither offered, nor asked for, nor desired.

Cognisant of Claims

Any teenager in a department store could hand over an antiseptic to a customer, but the pharmacist was the only person conducting a shop who was in a position to know something about the specificity of antiseptics, and he would be aware that a product genuinely possessing all the properties claimed for the advertised antiseptics simply did not exist. Mr. Fitch said that, if a pharmacist conscientiously served a customer, he doubted if the present margin of profit on the proprietaries was anything like adequate.

Dr. Bradshaw had said, about the future of control of the advertising of proprietary medicines:—

I BELIEVE that a body should be set up by the Government, but independent of it, and independent too of manufacturers, media owners, advertising agents, do-gooders, etc., that shall have the duty of continuously surveying the field of patent medicine advertising and the power to impose penalties for contraventions of an agreed advertising code, which would probably be similar to the present British Code. Such a body would probably have a part-time governing body, and a full time secretariat; the penalties it could impose would be fairly severe, and would be quashable only by a High Court judge. It would really be the advertising opposite number of the Dunlop Committee, which deals with drug safety. . . . This body would not see all advertisements before they were published; that would be quite impracticable.

There was a lot to be said for something to replace the present voluntary controls by advertisers themselves.

During the discussion on Mr. Fitch's paper, Mr. JOHN MITCHELL, Leeds, suggested that all medicines should be considered potentially dangerous. He believed that all advertisements should be submitted to an adjudicating board before issue. He had noted, in the advertising on television of a preparation containing phenacetin, how the emphasis had been changed when the names of compounds had been omitted; he thought the advertisement should be disallowed in its present form. MR. FITCH agreed that all medicines were potentially dangerous but saw practical difficulties in trying to "vet" all advertisements before publication.

DR. KAYE, Bradford, suggested that the pharmacist knew that many products had no real advantages but was in a dilemma. MR. FITCH commented that running a pharmacy did not prevent a pharmacist from acting in a fully professional manner.

Tax as a Luxury

MR. MITCHELL JOHNSON held that advertising, especially on television, was taking away the pharmacists' status. The Society should set up a committee to check products and give advice on them. The Ministry of Health should also take the lead in giving advice on health education. There must be more disciplining of manufacturers, and contraindications should be given in advertisements. Proprietary medicines should be "taxed highly . . . as a luxury." Pharmacists emphasise standards and the protection of the public rather than pressing for restriction of the sale of preparations. MR. FITCH suggested that pharmacists were qualified to form their own views on proprietary medicines, and should take whatever steps were necessary to implement those views.

MR. MAXWELL GORDON, Leeds, objected to so much emphasis on the responsibility of the individual. "We want advice, and then we can act in concert." What was the value of a code of advertising if it allowed a manufacturer to hide from his responsibilities?

MR. FITCH could not see why the pharmaceutical should be different from other professions in the matter of central guidance. The "action and uses" monographs of the Codex should enable the pharmacist to arrive at a judgment.

MR. D. W. FISHER, Wakefield, argued that the Pharmaceutical Society should co-ordinate the activities of the various advertising codes.

MR. D. HOLLOWS agreed a lot of pharmacists did not think seriously enough about the products they handled. Doctors received guidance from central bodies and he saw no reason why "patent" medicine manufacturers should not submit their claims to the Pharmaceutical Society for approval in the same way that applications were made to the Dunlop Committee. MR. FITCH asked "If we were to advise pharmacists not to stock preparations, what would happen?" MR. G. A. HUTTON, Doncaster, replied "I am sure we would support the Society." An attempt should be

made to make illegal the advertising of medicines, "including 'ethicals' . . . to the doctors except through certain authorised channels."

Drug Controls

The afternoon session was given over to "Progress in Drug Control." DR. D. C. GARRATT outlined problems created for the analyst by the production of more potent complex chemicals as drugs and by changes in prescribing and pharmaceutical practice. Techniques now available to analysts had revolutionised methods of controlling medicinal products. Much smaller amounts of chemicals could now be determined accurately: a necessity with the small dosages used in prescribing, but the pharmaceutical analyst must still, before applying newer methods, solve the problems of separating active constituents from complex formulated products.

For a number of reasons many specifications based on assessment of the purity of drugs by physical and chemical constants were proving inadequate. Standardising committees were turning to the opinion that the impurities likely to be present must be assessed and limited, especially if of a toxic nature.

Dr. Garratt outlined the work of preparing official monographs and dealt with the tolerances allowed and their significance. Under recently notable advances in formulation, drug activity was modified or otherwise controlled. There was a growing need for performance tests on formulated products. Quality control was not confined to analysis. It must be exercised by everyone concerned at all stages in the manufacture, packing and supplying of any pharmaceutical product. Stocks of formulated products held in retail practice were likely to be stored for the longest time and were susceptible to the greatest deterioration. The speaker compared the outside control of medicinal products imposed by the authorities, both through the Food and Drugs Act and the drug-testing scheme for England and Wales, with the Scottish drug testing scheme.

Answering DR. KAYE, Leeds, DR. GARRATT said that the quality control of aerosols was being looked at by one of the standardisation committees of the Codex Committee but that the solution had not yet been found.

MR. I. MITCHELL believed their introduction of synthetic flavours into the Codex would be of value in the preparation of pharmacists' own formulations. In view of variations in patients' teaspoons and tablespoons, was it not irrational for manufacturers to go to such tremendous lengths in control assays?

Difficulty with Flavours

DR. GARRATT said there was difficulty in replicating flavours even when using identical formulas.

He agreed with MR. H. WRIGHT, York, that if, during February 1966, a pharmacist received a preparation whose label showed that it should not be used after March 1966, then it should be "sent back."

To avoid the embarrassment that arose when a patient was given a preparation that was nearing the end of

its validity MR. DARLING suggested that expiry dates should be printed in code. That, rejoined DR. GARRATT, would need the co-operation of all manufacturers and the compilation and publication of a complete code. MR. D. ROYCE, Wakefield, who wanted to know what work was in hand on the use of plastics tubes for eye ointments, was told that intensive work had been done on problems arising from both plastics and metal tubes. To MR. W. K. PRESTWICH, Leeds, who suggested that a logical step after microfining would be to issue a preparation in a liquid form, DR. GARRATT replied that stability was often impossible to achieve in solutions.

MR. D. FEARNLEY, Leeds, having found that some enteric-coated tablets of ammonium chloride made by a reputable manufacturer had failed the disintegration test, considered Dr. Barratt's concept of the "reputable manufacturer" invalid. Dr. Garratt called for a sense of proportion in such matters. On the whole proprietary manufacturers made good products. The disintegration test was, he admitted, an important one, and a lot of useful similar simple tests could be done in hospitals without requiring expensive apparatus. MR. E. MAUDE, Bradford, asking "how accurate was quality control," mentioned analytical reports varying from 2 to 3 per cent. "We now know," said DR. GARRATT, "that analytical precision is not so great as we thought it was." MR. WARD, Sheffield, sought comments on the situation in which an analyst had rejected a batch of a drug but other officials of the company had overridden that decision. DR. GARRATT was of the opinion that the analyst should be in full autonomous control.

MR. BLAND, Halifax, referred to analysts' difficulty in obtaining samples of drugs from manufacturers, and Dr. Garratt said in reply that he hoped the Pharmaceutical Society's collection of reference specimens of drugs might, when completed, be of considerable help. When MR. W. K. FITCH, London, suggested that the National Health Service testing scheme had no scientific or statistical basis, Dr. Garratt said "I agree."

An Analyst's View

MR. DALLY (public analyst), Leeds, said he had not had any difficulty in getting samples from manufacturers. They had often even provided methods of analysis. It was his experience that only a small proportion of samples proved unsatisfactory, usually because of over-long storage. Perhaps something should be done about the tendency to offer chemists cheap rates for quantity. There was a great need for rationalising the sampling and testing of both drugs and foods. He would like to see a reduction in the number of enforcing authorities and number of laboratories. As apparatus became more complex and costly, it should be kept in continuous use. That could only be achieved in regional laboratories.

Members agreed to hold a similar conference in Bradford in 1967 and to consider opening it to members of the York Branch.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN

Symposium on Dosage of Medicines

A SYMPOSIUM entitled "Dosage of Medicines" promoted by the Pharmaceutical Society of Great Britain was held at the School of Pharmacy, University of London, on March 24.

First paper, "Factors Affecting and Methods for Assessing Dosage," written by R. F. Crampton and E. Pride (Abbott Laboratories, Ltd.) was presented by Dr. Crampton.

The authors defined the dose of a drug as being the amount given that produced the desired effect—a "gross over-simplification," but that had the great merit of stating clearly the need for defining what effect was required. More meaningful was the definition of a dose as the amount of drug which, when given to one particular patient, by one particular route of administration, produced the required effect with no minimal adverse effects. That definition introduced a few of the variables affecting drug dosage, but clearly indicated that, from a practical prescribing point of view, the amount of drug that should be given to a patient could not be stated as an exact quantity.

Body-weight Factor

Apart from biological variation, which should be defined for each new drug, and over which little or no control could be exercised, many factors affecting drug dosage were subject to control. Those factors could be broadly classified into human factors, chemical and physical properties of the drug, pharmaceutical properties of the dosage form, and the effect or degree of effect required. For many years, it had been tacitly assumed that body weight was the crucial factor, and it was still true that nearly all the numerous rules for altering dosage according to different body size used body weight as the criterion. The genetical make-up of an individual would always finally determine the response of that individual to a particular dose of a particular drug. It might, in fact, be considered that all frequency distribution curves of drug dose/response relationships were the expression of the differences in the whole genetical make-up of the individuals examined.

There were many examples of modification of drug action by disease. Hepatic and renal insufficiency were the most common drugs, if given for an undue length of time, could produce an increasing frequency and extent of toxic reactions persisting after treatment had ceased. The various nitrogen mustards showed that toxic effect by a progressive destruction of haemopoietic tissue, so necessitating careful dosage control if a suitable balance between beneficial and toxic effects were to be achieved. Other important examples were phenacetin and erythromycin estolate, both were relatively non-toxic when given for short periods but capable of producing kidney and liver damage respec-

tively if ingestion were prolonged. Other drugs produced the desired clinical effects only after a period of normal dosage, and the effects persisted after dosage had ceased. Drug-plasma binding was fairly common, and had a strong bearing on the dosage regime, as it determined the availability of the drug to the body as a whole. Drug tolerance was frequently seen by the general practitioner, and the subject had been extensively studied.

Only in the last decade or so had the status of the clinical trials been generally accepted as a scientific method of evaluating drug efficacy. Many trials were still reported that were poorly planned or inadequately controlled, or whose results were improperly analysed. That was due partly to the many problems associated with any trial, and possibly to the fact that there were too many drugs available for trial compared to the number of competent and interested clinical investigators. It was essential that the results of the first trial should be confirmed by other clinicians, and in the planning stage of instituting further trials such factors should be given cognisance. As the trials progressed, some variation of dose originally established might emerge. Moreover—and most important—as the number of patients exposed to the drug increased the true range and frequency of side effects began to emerge. To generalise was not possible, each drug presented its own set of problems.

When DR. N. SENIOR suggested that practitioners might begin treatment by first using a quarter of the dose and then proceed to increase the dose until the required effect was obtained, DR. CRAMPTON pointed out the general practitioner was "a pretty busy chap and he wanted to know the dose before he started using the drug." It was also necessary to use a new drug in 100,000 patients before a complete portfolio could be prepared. Most drugs when presented for general use had probably been used in no more than 20,000 patients and for the first five years or more it was necessary for the clinicians to be strict in their assessments.

Dr. Crampton then went on to refer to the proposals for the diabetic screening and he then suggested that it might be advantageous if a large scale enzyme screening of the public was undertaken.

Allergic Reactions

Another contributor pointed out that in many cases it was necessary in clinical practice to give a drug in adequate doses and Professor O. L. Wade suggested that those who had exhibited an allergy were more likely to yield adverse reactions to some drugs but DR. CRAMPTON was inclined to disagree with that suggestion, whereupon PROFESSOR WADE referred to a hospital investigation where there had been 508 admissions and eighty-seven of them had exhibited an allergic drug reaction and of them about 6 per cent. yielded an adverse reaction to some drugs.

Both Dr. Crampton and Professor Wade agreed that much more evidence would be required in order to confirm the true situation.

When another speaker suggested that skin tests for allergic reactions might be a method of screening, Dr. Crampton said that skin tests were not usually carried out during investigations of new drugs.

The next paper, "Effect of Formulation on the Efficacy of Drugs" was presented by A. E. Davis (Boots Pure Drug Co., Ltd.).

It pointed out that nowadays the formulation of new drugs was carried out almost entirely in large industrial organisations, almost necessarily because of the considerable technical resources needed and because the formulation was so closely bound up with the ultimate large scale production process. The following stages were usually involved though they were not necessarily carried out or completed in the order given:—(1) To study all available data on the activity, absorption and distribution of the drug in the body. (2) To examine the chemical and physical characteristics of the drug and consider the special requirements imposed by these features. (3) To evolve a dosage form and show that the drug was biologically available from it. (4) To ensure that the formulation would be stable for its required shelf life. (5) To establish and record in detail a manufacturing process which could be repeated with uniform results. (6) To lay down detailed specifications for the finished preparation together with equally detailed specifications for the ingredients. The paper dealt briefly with each of those stages.

Extensive Literature

There was now an extensive literature on the absorption and distribution of drugs, most of it of quite recent origin. A symposium in 1963 had examined the biochemical, medical and pharmaceutical aspects, and the published account had provided a most valuable survey of the subject. It outlined the physical and chemical factors involved in drug absorption and indicated how drug efficacy was affected by the way in which the drug was formulated.

After the initial pharmacological and toxicological studies had been completed the pharmacist responsible for formulation began by making a study of the characteristics of the compound. Among the most important features were melting point and solubility and, of course, behaviour of the drug on exposure to heat and light, to atmospheric oxygen and to moisture. The colour, taste and odour of the material were also important. Often examination of those characteristics at that stage indicated the dose form that should be used, or pointed to the need for chemical modification of the compound in order to produce a particular dose form.

(To be concluded)

A Statutory Committee Direction Quashed

SUCCESSFUL APPEAL BY A CORPORATE BODY

THE Divisional Court, London, on March 24, allowed an appeal by Zygmont (Chemists), Ltd., Westbourne Grove, London, W.2, against the direction, given on October 1, 1965, by the Statutory Committee of the Pharmaceutical Society of Great Britain (sec 1 & D., October 16, 1965, p. 386), removing the appellants' premises from the register of premises kept under the Pharmacy and Poisons Acts. Giving judgment the Lord Chief Justice (Lord Parker) said that the appellants originally had three different sets of registered premises, at Westbourne Grove, Charing Cross, and Baker Street. In July 1963 they pleaded guilty to charges of selling a Part 1 poison otherwise than by or under the supervision of a registered pharmacist, and of selling the poison without the name of the seller and the address of the premises being on the container or label. On March 5, 1964, an inquiry was held by the Society's Statutory Committee and from the chairman's findings Lord Parker understood that the Committee were gravely concerned that the appellants were not taking their responsibilities seriously and, in particular, were not rendering the superintendent pharmacist for the time being adequate facilities to enable him to perform his somewhat onerous duties under the Pharmacy Acts. The Committee were minded to give the appellants twelve months to see, in effect, if they would mend their ways.

Four Changes

On May 11, 1965, the matter came back before the Statutory Committee under a different chairman (Sir Benjamin Ormerod), when the Society's Inspector gave evidence about what had transpired during the twelve months. He told them that there had been more than one change of superintendent pharmacist—there had been four—and one superintendent had said that he was having difficulty in getting the appellants to co-operate with him.

At the end of that hearing the chairman said that the company had had "a very narrow shave so far as these premises are concerned in so far as being struck off the register is concerned, because there is no doubt that there was considerable irregularity there at one time . . . and there has been quite a considerable lack of co-operation . . . since the last meeting of the Committee." The appellants had, during the course of that year, given up their premises in Charing Cross Road and Baker Street, and their sole premises at that time were in Westbourne Grove. The offences in question, and the lack of co-operation had, until that time, been directed to the premises at Charing Cross Road, and Lord Parker said it looked as if Sir Benjamin Ormerod was not appreciating that fact when he said there had been considerable irregularity at Westbourne Grove. However, the Committee had powers, in a proper case, to remove all the premises of an offend-

ing company. The matter was then adjourned until October 1.

In the appeal, counsel had claimed that all that was relevant, when it came to sentencing a body corporate that had been convicted of an offence, was other offences or absence of offences under the Pharmacy and Poisons Act. The Statutory Committee had no business to enter into a general inquiry as to the conduct of the appellants when there was no suggestion of any other offences against the Pharmacy and Poisons Acts having been committed. Lord Parker said he could dispose of that point briefly by saying that, on purely general principles, a disciplinary body had to be entitled to look at all the reputation and conduct of the person concerned.

There was nothing improper in those adjournments for the purpose of making inquiries and, down to October 1, the conduct of the Committee could not be criticised in any way. They were clearly satisfied that the original offences had been caused by the superintendent not having adequate facilities or co-operation from the management.

Lord Parker said he was in much more difficulty, however, when he came to the hearing on October 1. There was then no real complaint of lack of co-operation, and it was admitted that the pharmacy at Westbourne Grove was conducted perfectly properly. When one looked at the transcript the only real complaint was that the appellants had, for one reason or another, had a great number of superintendents.

It was admitted that it was not easy to find superintendent pharmacists, and that it was common practice to take young men from Australia and New Zealand who, no doubt, left after a time to better themselves. The suggestion might be that the appellants were running their business on a shoestring and not paying enough, and, therefore, not getting permanent superintendent pharmacists. Whether that was in the Committee's mind he did not know. The present appeal was a re-hearing, and the court had been told that one of the superintendents was still there and, so far as the court knew, there had been no complaint from beginning to end as to his conduct or of lack of co-operation by the management.

"In this very unsatisfactory state of affairs," Lord Parker continued, he felt unable to say that the Committee had properly applied their minds to the question. "On the face of it something has gone wrong."

Incomplete Direction

Clearly the direction made had been incomplete and defective because, if the premises were to be removed from the register, the direction had to state that they were disqualified from being put on the register for some fixed period. No period of disqualification was imposed. He found it impossible *in vacuo*, without having any advice or guidance from the disciplinary body concerned, to know what the proper

period of disqualification would have been.

Lord Parker concluded that, in those peculiar—and unsatisfactory—circumstances, the only proper course would be to quash the direction and not attempt to amend it in any way, even if he felt it proper to effect any amendment. In those circumstances he would allow the appeal and quash the direction.

Mr. Justice Sachs and Mr. Justice Veale agreed.

The Court made no order as to costs. Lord Parker said he felt that the appellants would be "adequately punished, if I may put it that way, for the original offences, and such irresponsible conduct as they have evinced, if they pay their own costs up to date and of this appeal."

LEGAL REPORTS

A Watchman's Theft

WHILE working as a nightwatchman for Harker Stagg, Ltd., Emmott Street, London, E.1, Thomas Haxton Dryburgh who appeared at Thames magistrates' court on March 22, was alleged to have stolen £100 from an office cash box on February 28. He was committed for sentence to the Inner London Sessions. Dryburgh pleaded guilty.

Resale Prices

THE Restrictive Practices Court in London on March 28 approved a final order refusing to exempt invalid and other special foods, and related classes of goods, from the provisions of the Resale Prices Act, 1964. The application, by the Registrar of Restrictive Trading Agreements, was unopposed, and was one of eight similar orders granted by the court. The effect of the court's order is that resale price maintenance in respect of any of those goods is now illegal.

COMPANY NEWS

Previous year's figures in parentheses

ROUSSEL-UCLAF, LTD. — Mr. R. O. Atkinson, F.R.I.C., is appointed director of technical services, Roussel Laboratories, Ltd., whilst retaining responsibility for the management of Uclaf, Ltd.

IMPERIAL CHEMICAL INDUSTRIES, LTD.—The company are to sell their 41.2 per cent. interest in Compania Sud-Americana de Explosivos outstanding common stock for \$2.1 millions to E. I. DuPont Co., who already hold 57.6 per cent. of the Chilean company's shares.

WILKINSON SWORD, LTD.—Pre-tax profit for 1965 was £2,194,516 (£3,534,520) and net profit of parent company after lower tax of £767,801 (£1,933,450) was £1,321,358 (£1,482,912). The dividend is unchanged at 25 per cent.

BUTLER CHEMICALS, LTD.—Net profit for 1965 was £61,356 (£96,640)—there was no tax charge, against a credit of £4,464 for 1964. The dividend

is unchanged at 12½ per cent., with a final of 8½ per cent. Depreciation change was £72,656 (£54,408) and interest, £10,448 (nil). With £8,694 from provision no longer required, the balance is £70,050.

GOODWIN STOREFITTERS, LTD., and its associated companies (Counterpoint Store Equipment, Ltd., Contalex Lighting, Ltd., and Metal Technics, Ltd.), joined the Winn Industries, Ltd., group of companies on March 22. Mr. A. J. Goodwin remains managing director of all four Goodwin companies, which will continue to operate as previously.

UNITED GLASS, LTD.—The group is offering to acquire the Ordinary capital of British Heat Resisting Glass Co., Ltd., at £4 3s. 9d. per share, equivalent to about £625,000 for all the equity. The directors of the two companies have reached agreement on the offer. The board of BHR, with other holders associated with them, have agreed to accept the offer in respect of their own holdings, amounting to about 70 per cent. of the capital.

NORCROS, LTD.—Reviewing the performance of the subsidiary companies for year ended November 30, 1965, the chairman (Mr. J. V. Sheffield), states that the subsidiary S. Maw, Son & Sons, Ltd., again increased its sales by a substantial amount. Profits were again at a record level, though lack of freedom to raise selling prices had led to pressure on margins. Results of the division are not strictly comparable with previous year's owing to the deduction of the minority interest [N.P.U. Holdings, Ltd., acquired a 25 per cent. interest during the year]. Lantigen (England), Ltd., and Lantigen (Export), Ltd., "are doing well." [For financial statement and dividend see *C. & D.*, March 5, p. 225.]

ASHE CHEMICAL, LTD.—Through their subsidiary companies the group have agreed to purchase from Aspro-Nicholas, Ltd., with effect from April 1, certain trade marks with almost world wide coverage, together with the manufacturing and marketing rights. The products affected are mentioned on p. 331. The sale of the Kruschen trade marks at present only extends to the United Kingdom and the Republic of Ireland. In addition Ashe Chemical, Ltd., are acquiring the Aspro-Nicholas Group's freehold factory at Salford, Lancs, for additional manufacturing and as a base depot for the distribution of their general range of products to customers in Scotland and the North of England. The total consideration payable in cash will be approximately £214,000.

BUSINESS CHANGES

MR. B. A. PATEL, M.P.S., has acquired the pharmacy of Mr. A. B. May, M.P.S., 153 Maybury Road, Woking, Surrey.

ALBION LABORATORIES, LTD., is the new trading title of Geddon Richter (Exports), Ltd., 14 Weedington Road, London, N.W.5.

NATIONAL ASSOCIATION OF PHARMACEUTICAL DISTRIBUTORS has moved to permanent offices at Sherwood House, 176 Northolt Road, South Harrow, Middlesex (telephone: 01-864-0443).

MR. J. M. WELSH, M.P.S., 22 Adelaide Terrace, Newcastle-upon-Tyne, 4, closed down his pharmacy on March 31.

Appointments

SYNTEX PHARMACEUTICALS, LTD., Maidenhead, Berks, have appointed Mr. R. F. Priddy their training officer.

MAWS PHARMACY SUPPLIES, LTD., Aldersgate House, Barnet, Herts, have appointed Mr. A. L. S. Rich their sales office manager. In addition to his new duties Mr. Rich will continue to be the company's market research officer, a position he has held for the past six years, and will also be responsible for the export sales department of the company.



port sales department of the company.

PERSONALITIES

MR. A. G. FISHBURN, F.P.S., F.R.I.C., has been appointed a member of the British Pharmacopoeia Commission to fill the vacancy arising from the death of Mr. D. W. Hudson, M.P.S.

MR. L. J. INMAN who has spent nearly fifty-two years of his active business life in the surgical dressings world retired on April 1. Mr. Inman commenced his career with Carnegie Bros. in 1914, joining Alexander Carus & Sons, Ltd., of Darwen, in 1943 as London manager.

MR. J. M. LEWIS, M.P.S., who has been in business at Pontnewydd, Pontypool, since 1930, has been presented with a radio and stereogram on retiring after twenty-three years' service as secretary of the Monmouthshire and Newport Pharmaceutical Committee. The presentation was made by Mr. George Clark, Malpas (chairman of the Committee).

Fellows of the Royal Society

THE following, in addition to those already given (*C. & D.*, March 26, p. 295) were among those recently elected Fellows of the Royal Society.

DR. W. R. S. DOLL, director of the Medical Research Council's Statistical Research Unit and lecturer in medical statistics and epidemiology at University College Hospital Medical School in the University of London.

DR. A. ISAACS, member of scientific staff, National Institute for Medical Research, London, for studies of virus interference and the discovery and characterisation of interferon.

DR. L. M. PICKFORD, reader in physiology, department of physiology, University of Edinburgh, for work on the control of pituitary function and on posterior pituitary hormones.

PROFESSOR H. O. SCHILD, professor of pharmacology, University College, University of London, for contributions to pharmacology and physiology, especially in the study of anaphylaxis and the action of drugs on smooth muscle.

DR. H. M. STANLEY, director and controller, research and development division, the Distillers Co., Ltd., London, for discovery and application of new chemical processes to the synthesis of industrially important compounds.

DEATHS

MILLER.—At Queensberry Lodge, Edinburgh, on March 24, Mr. Alexander Donald Miller, M.C., aged seventy-five. Mr. Miller, who qualified as a chemist and druggist in 1914, was for many years in the pharmaceutical department, Royal Infirmary, Edinburgh.

ORMISTON.—On March 24, Thomas MacLay Ormiston, O.B.E., L.R.C.P.S., L.R.C.P.E., L.R.F.P.S., M.P.S., 7 Newton Place, Glasgow. Dr. Ormiston was formerly professor of zoology in the now extinct Anderson College of Medicine, Glasgow. He registered as a pharmacist in 1909 and retained his membership of the Society.

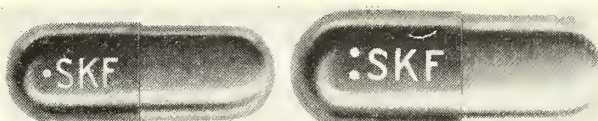
PACKER.—On March 22, Mr. Francis John Packer, M.P.S., 29 Venn Crescent, Hartley, Plymouth, aged fifty-five. Mr. Packer qualified in 1932. In 1947 he started in business in Chapel Street, Stonehouse, before transferring to 91 Swilly Road, Plymouth. He was a past chairman of the Plymouth Branches of the Pharmaceutical Society and National Pharmaceutical Union. Mr. P. L. Cohen (chairman, Plymouth Branch, N.P.U.) writes:—The sudden death of my lifelong friend Frank Packer, a former chairman of the Plymouth Branch of the N.P.U., came as a bitter blow to all our members as well as to his many friends in pharmacy. Besides his N.P.U. activities he was a member of the chemist contractors committee. Mr. Packer was a kindly and social individual, always ready to offer sound judgment, particularly in the interest of pharmacy, and his ability of rapidly getting to the fundamentals of all our problems will be sadly missed on all the committees on which he served. Plymouth pharmacists will be sad at his passing. May I, through your columns, express our sincere sympathy to his widow, son and daughter. Mr. Mervyn Madge (secretary, Plymouth Branch of the Pharmaceutical Society) writes:—The untimely death of Mr. Frank Packer came as a sudden and bitter blow to all members of the Plymouth Branch. He had been a past chairman, and a keen member of the pharmaceutical committee. He was one of the most popular members in the area. Well liked and respected for his integrity, honesty of purpose and a deep understanding of pharmaceutical problems. He had the ability of quickly getting at the fundamental basis and reducing it to simple terms. His knowledge and wisdom was well known. I personally have known Frank Packer since childhood and mourn his passing, and I know that this feeling is also shared by all the members of the Plymouth Branch.

TRADE NOTES

An "Economy" Size.—Dae Health Laboratories, Ltd., 17 Berners Street, London, W.1, have added a new economy "size to their existing range of packs of Veet odourless hair-removing cream.

Now in Two Perfumes.—Beecham Toilet Division, Beecham House, Brentford, Middlesex, now offer their Du Lundi Body Mist in lemon bouquet and Persian rose perfumes.

POWDER CAPSULES
LOW MONO-
GRAMMED: Capsules of Dibenylamine and Dye of Smith Kline & French Laboratories, Ltd., Welwyn Garden City, Herts, now carry the SKF monogram shown in the illustration. Single dot indicates half-strength No. 1 capsules, two dots the full-strength No. 2. In due course all powder capsules of the company will take the monogram.



Professional Camera.—Distributors of the Polaroid model 180 Land professional camera are Polaroid (U.K.), Ltd., Rosanne House, Welwyn Garden City, Herts. [Corrected note.]

Registered Trade Marks.—Ansun Proprietary, Ltd., 12 Church Street, Silverdale, Newcastle, Staffords, point out that Ansun, Pedicex and Sungold are registered trade marks of the company.

Distribution Depôts.—May & Baker, Ltd., Dagenham, Essex, have appointed a number of regional distributors of their turf products. The new method of distribution will, they claim, improve its efficiency and simplify the supply of those products to users and retailers, who will in future be able to place orders direct with the distributor and take advantage of his technical advisory service as well as that of the manufacturer.

Disclaimer.—Concerned at reports in Newcastle newspapers that teenagers have been taking cold capsules to replace drugs commonly known as "purple hearts," the Phillips, Scott & Turner Co., 2 St. Marks Hill, Surbiton, Surrey, whose factory is at Newcastle, have issued a statement declaring that none of the products described by the Newcastle papers have any connection with the company's speciality, Coldrex, which contains no ephedrine.

Change of Distribution.—Litespace Sportswear, Ltd., Keighley, Yorks, announce that, from April 1, the distribution of Litespace supporters to chemists is being made through wholesalers and not as previously. Messrs. Litespace state that, if any difficulty is experienced in obtaining supplies during the transitional period, stockists should write personally to the company's director/general manager (surgical division) at Keighley, who will see that their requirements are attended to immediately.

Pack Changes.—Sandoz Products, Ltd., Sandoz House, 23 Great Castle Street, London, W.1, are now manufacturing Calcium-Sandoz syrup in their U.K. plant. The product is being packed in bottles of 250 and 500 mls (discontinued 200-ml pack is still available in the Republic of Ireland). The palatable syrup provides 325 mgm. of elemental calcium (16.2 mEq. Ca⁺⁺) in a 15-ml

tablespoonful for high-dose calcium therapy. It is understood to be free of electrolytes other than calcium.

Transfer of Ownership.—To concentrate on high-volume products, Nicholas Products, Ltd., have sold to Ashe Laboratories, Ltd., Ashetree Works, Kingston Road, Leatherhead, Surrey, the products Baxen, Bronchipax, Hemotabs, Karswood powder, spices and tablets, Kruschen salts, Lemskin

hand jelly, Monastery herbs, Persomina and Shavex. Invoices for orders received up to March 29 will be payable to Nicholas Products, Ltd. From March 30 orders should be sent to Ashe Laboratories, Ltd.

Vaccine's Action Speeded Up.—Protective antibodies against distemper are built up within three to four days of vaccination of a young puppy (against seven to ten days with the standard type of vaccine) following a refinement in production of Epivax dog distemper vaccine, suppliers of which are the Wellcome Research Laboratories, Beckenham, Kent. The new product is available to veterinary surgeons under the brand name of Epivax TC (for tissue culture). The new method involves growing the vaccine in living tissue (taken from disease-free chick embryos) instead of on membranes in fertile eggs as hitherto. The new method also cuts out the risk (already small) of reaction from the minute proportion of puppies which, like some humans, may prove to be hypersensitive to egg protein.

Fixed Prices Ruled Illegal.—A decision taken by the Restrictive Practices Court makes illegal the maintenance of prices of the invalid foods Casilan, Complian and Glucodin. (Under the Resale Prices Act, 1964 the makers, Glaxo Laboratories, Ltd., Greenford, Middlesex, had registered all of its medical, veterinary and food products, and minimum resale prices had applied to them for many years.) On advice received from counsel, Messrs. Glaxo decided that they could not present arguments likely to succeed in gaining exemption from the provisions of the Act for invalid foods. In a preliminary hearing before the Restrictive Practices Court on January 13 (see C. & D., January 22, p. 76), the company had applied for its infant and invalid foods to be excluded from reference to the Court, which held that infant foods (including Ostermilk No. 1 and No. 2 and the Farex range) should be excluded from the reference at least until the Monopolies Commission (which is to consider the distribution of infant milk foods) has reported to the Board of Trade. The representations, though successful for infant foods, were not accepted for invalid foods. Messrs. Glaxo point out

that resale price maintenance continues for Ostermilk and Farex products, subject to any future decisions by the Court or the Monopolies Commission. Medical and veterinary products have not yet been referred to the Restrictive Practices Court. Resale price maintenance in respect of them continues, and the company intends to defend the situation "to the utmost possible extent" when a reference is made. The company's terms and conditions of business, as printed in its chemists' price list and on all advice notes, are being altered as necessary to take account of the new position in respect of Casilan, Complian and Glucodin. [A report of the hearings is on p. 329.—EDITOR.]

U.K. Outlets Extended.—Swiss Home Beauty Services, 39 James Street, London, W.1, are extending the marketing advertising and distribution of products of Milopa Cosmetics, Switzerland, in the United Kingdom. New agents have been appointed to a total of 300 and are currently being trained and informative literature is being distributed. A representative range of the products assembled in a special wholesale offer includes a make-up series prepared specially for the British market. In all there are twenty-nine specialities, including Peeling, designed for skin stimulation and improvement. Greenleave cream, "Turtle Night," mink-oil cream and cream X night creams (each for a specific age group); Milopharme for treating spotty and acneaceous conditions; Sandor cream (a vitamin saturation conditioner), and other products. Leaflets of instructions giving the full formula of each product are included in the packs, enabling retailers and users to judge the quality of the preparations. Applications from medium-sized high-class pharmacies to take up agencies are being considered, and the concessionaires state that large initial orders are not insisted upon from newly appointed agents.

Holiday Closings.—Normal holiday closing of wholesalers and manufacturers in the industry is from closing time on Thursday, April 7 until Tuesday morning, April 12. E. R. SQUIBB & SONS, LTD., London and Twickenham, are closing at 3.30 p.m. on April 7. MARTINDALE, SAMOORE, LTD., Salem Road, Queensway, London, W.2, are open as usual on Saturday morning, April 9.

THE following have announced that urgent supplies are available from John Bell & Croyden, 50 Wigmore Street, London, W.1:—

DISTA PRODUCTS, LTD., Speke and Wimbledon.
MARTINDALE SAMOORE, LTD., Salem Road, Queensway, London, W.2.

PHARMAX, LTD., Thames Road, Crayford, Dartford, Kent.

E. R. SQUIBB & SONS, LTD., Liverpool and Twickenham.

A. WANDER, LTD., 42 Upper Grosvenor Street, London, W.1 (in Northern Ireland from J. & W. C. Gaw, Belfast).

Competitions

Hundreds of Premium Bonds.—A member of the staff of Agfa, Ltd., 27 Regent Street, London, W.1, is visiting chemists with photographic departments from Easter onwards. He or she will request either a low-priced, easy-load camera or a film that will

give me true-to-life colour prints. If the dealer's first recommendation is an Agfa Rapid camera or Agfa Universal film he wins a £5 prize (an assistant £3).

An Extra for the Finalists.—André Philippe, Ltd., 71 Gowan Avenue, London, S.W.6, have arranged for the six finalists in the Miss André Philippe competition 1966 to receive an additional gift of a Nelbarden swimsuit presented by the makers and made to measure.

Display Competition Prize-winners.—In the recent composite pack display competition, open exclusively to chemists, organised by Beecham Proprietary Medicines, Great West Road, Brentford, Middlesex, first prize (a £1,000 shop refit) went to Birmingham Co-operative Chemists, Ltd., Coventry Road, Small Heath, Birmingham. The £100 prize for the winning chemist's assistant is being given to the social club of the Birmingham Co-operative Society, Ltd. Runner's-up prize (a £500 shop refit) was won by Arnold's Pharmacy, Ltd., Allhalland Street, Bideford, Devon, and three assistants at the pharmacy gained a visit to a London theatre and a clothing outfit each as prizes. Shop refits are being carried out by Nordia (Wm. Mason, Ltd.), so soon as possible.

Bonus Offers

CUSSENS, SONS & CO., LTD., Kersal Vale, Manchester, 7. Baby powder (large and small). Twelve invoiced as ten. Until May 31.

DENDRON DISTRIBUTORS, LTD., 94 Rickmansworth Road, Watford, Herts. New Yaxa aerosol deodorant, mist deodorant and roll-on. Twelve invoiced as eleven. Until April 15.

MAWS PHARMACY SUPPLIES, LTD., Aldersgate House, Barnet, Herts. Plastic baby pants. Fifty-one pairs invoiced as forty-eight.

PRACTICAL PHARMACEUTICALS, LTD., 50 Jesmond Road, Newcastle upon Tyne, 2. Hermesetas. Twelve invoiced as eleven. Until April 30.

THE BRITISH DRUG HOUSES, LTD., Graham Street, London, N.1. Treps anti-diarrhoeal tablets. Twelve invoiced as ten. On minimum order of 1 doz. Until April 30.

COMBY (LONDON), LTD., 9 Violet Hill, London, N.W.8. Comby Three Castles brushes. One free with order for ten ladies' and two gents' hairbrushes; brush and display stand free with order for ten ladies' (including two pure bristle) and two gents' brushes; and one brush and display stand free with order for twelve ladies' brushes priced at 4s. 6d. to 10s. 6d. each.

Premium Offers

CUSSENS, SONS & CO., LTD., Kersal Vale, Manchester, 7. Imperial Leather giant soap. Four-pence off retail price. Until May 31.

DENDRON DISTRIBUTORS, LTD., 94 Rickmansworth Road, Watford, Herts. Yaxa roll-on. Shilling off retail price.

MAWS PHARMACY SUPPLIES, LTD., Aldersgate House Barnet, Herts. Plastic baby pants. Three for 2/9.

INFORMATION WANTED

The Editor would appreciate information about: KH3 capsules

NEW PRODUCTS AND PACKS

PHARMACEUTICAL SPECIALITIES

Penicillin Capsules.—Boots Pure Drug Co., Ltd., Station Street, Nottingham, announce that their Stabillin V-K range now includes bottles of 100 125-mgm. and 250-mgm. capsules of phenoxymethyl penicillin.

New Presentations.—Beecham Research Laboratories, Great West Road, Brentford, Middlesex, have added to their range of Penbritin presentations 500-mgm. capsules in canister of 100 for patients prescribed the product in that or larger dosages, and 100-mgm. injection vials in canister of ten for paediatric therapy.

An Unbreakable Container.—Abbott Laboratories, Ltd., Queenborough, Kent, announce that, over the next few months, the glass bottle of Selsun suspension, claimed the most effective treatment for seborrhoeic dermatitis and related conditions, is being discontinued in favour of a white plastic bottle, as and when each size becomes available. The new container will virtually eliminate breakages, whether in transit, in the pharmacy, or in the user's home. The product itself is unchanged. Pack sizes are 1, 2 and 4 oz.

Symptomatic Treatment of Hay Fever.—CIBA Laboratories, Ltd., Horsham, Sussex, have launched a new speciality Otrivine-Antistin for the symptomatic treatment of hay-fever and seasonal nasal allergies caused by pollen of trees, grasses, flowering shrubs, and other airborne allergens. The product combines the nasal decongestant properties of Otrivine, a mild vasoconstrictor with an action lasting up to eight hours on the inflamed nasal mucosa, and the gentle but pronounced antihistaminic action of Antistin in reducing the excessive secretion, nasal irritation and sneezing associated with nasal allergies. The new product is claimed to have a long-lasting action making it eminently suitable for the relief of hay fever by day or night, one administration of the spray or drops at bed time being usually sufficient to maintain a clear nasal airway until the following morning. The speciality is available as nasal solution and nasal drops each in $\frac{1}{2}$ -oz. bottle, and is understood to be suitable for patients of all ages. The nasal solution contains 0.05 per cent. w/v of xylometazoline hydrochloride and 0.5 per cent. w/v of antazoline sulphate.

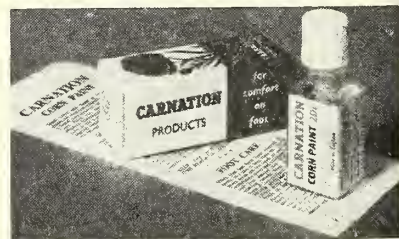
Acne Lotion and Analgesic Tablets.—British Schering, Ltd., 225 Bath Road, Slough, Bucks, have introduced two new pharmaceutical specialities, Komed lotion for the treatment of acne vulgaris, and Placodin analgesic and anti-inflammatory tablets. The lotion is claimed to provide "therapeutic efficiency with enhanced patient acceptability." The formulation is, understood to ensure that nascent sulphur is released at the comedo site without the characteristic odour of the chemical, whilst irritation is controlled with colloidal alumina. The lotion is claimed to be non-staining and non-oily and is issued in a 1-oz. squeeze bottle. It dries quickly on the skin, leaving, it is stated, an almost invisible film over

which cosmetics may safely be used in the normal way. The other speciality, Placodin tablets, contains aloxiprin which, the makers state, "has gained acceptance as the salicylate in the treatment of pain and inflammation because it enables higher salicylate blood levels to be achieved with a lower incidence of gastric irritation and bleeding," and codeine, which is present as a new tasteless resinate salt that enables the tablet to be chewed. The pack is a carton of 100 tablets in ten strips of ten.

OVER-THE-COUNTER MEDICINALS

Analgesic Combination.—Dales Pharmaceuticals, Ltd., Power Road, Chiswick, London, W.4, have launched a new paracetamol-codeine tablet, Pandrin, each tablet of which contains 380 mgm. of paracetamol, 7 mgm. of codeine phosphate, and 10 mgm. of caffeine monohydrate. The pack is a bottle of twenty-five tablets.

"Chemists Only" Corn Paint.—Cuxson, Gerrard & Co., Ltd., Oldbury, Birmingham, have added to their Carnation range of "chemists only" foot



comforts Carnation corn paint, coinciding with the offer of a new "dispenser" for the whole range, which is being backed by heavy advertising.

FOODS

Fruit Drinks in Plastic Bottles.—After a trial run in the Midlands, J. & J. Colman, Ltd., Norwich, are to market their whole orange and



whole lemon drinks in clear PVC plastic bottles on a national scale commencing in April. They point out that, when filled, the bottle weighs one-third less than the glass bottle. Other advantages claimed are convenience for shelf storage and, when empty, ease of disposal. Price of the new pack is the same as for the glass bottle, which will continue to be available. The plastic bottle is exclusive to Messrs. Colman. It was developed and is supplied by Kingston Mouldings, Ltd. (part of Mardon International Group), Orchard Way, Bognor Regis, Sussex, who installed a French Lesieur machine for

its high speed production. Imperial Chemical Industries Ltd., developed the special grade of PVC (PCO 634).

COSMETICS AND TOILETRIES

Perfumed Deodorant.—International Chemical Co., Ltd., 12 Chenies Street, London, W.C.1, are launching nation-



ally a new pleasantly perfumed deodorant, Ban-O-Dor in container of purple and gold.

"Young" Lipsticks and Powders.—During the past two years or so, say Goya, Ltd., 161 New Bond Street, London, W.1, most young girls have used little or no lipstick. One of the reasons is believed to be that it has been impossible to get a really pale lipstick that does not darken on the lips. That problem Messrs. Goya claim to have overcome with their new "Softly" rose (beige pink); apricot (beige gold) and honey (beige copper) shades. New "tawny mist" Goya Golden Girl face powder or "Beauty Puff" compressed powder, and new "Crystal Pearl" (green) powder for translucence, are claimed to "bring a youthful, healthy radiance which seems to come from beneath the complexion."

SUNDRIES

Perforated Film Absorbent Dressing.—Smith & Nephew, Ltd., Bessemer Road, Welwyn Garden City, Herts, announce that their Melolin XA dry, non-adherent, perforated film absorbent dressing has been included in the Drug Tariff in recently introduced 5 cm. x 5 cm. (2 x 2 in.) size, individually wrapped and sterilised. The dressing may be prescribed, like the 4 x 4 in. size already available, under the official description "perforated film absorbent dressing" (P.F.A. dressing). In the absence of any indication on the script of the size of dressing required, the supplier dispenses the new size.

Algicidal Spray.—Dimanin, an algicidal spray marketed by Baywood Chemicals, Ltd., Bedford Row, London, W.C.1, is a soluble powder containing as active ingredient alkyldimethylbenzylammonium chloride. The compound has been widely used on the Continent for controlling of algal growths in milking and brewing plants and swimming pools, and has parallel uses in the garden. The product is understood to be non-corrosive to metals, glass, plastics, polythene, stone, concrete, wood, brick and fibre glass, not to discolour and to be odourless and pleasant to handle. It is non-poisonous. Dimanin may be applied by a watering can, sprayer or brush. Claimed harmless to pets, birds and bees, it dissolves in water (no risk of blockage to a spray nozzle) and is recommended for removing algae from

greenhouse surfaces and staging, seed boxes, plant pots, seed trays, cloches,

frames, paths, walls, fences, roofs, garden ornaments, etc., and all glass.

'MISTAKE-PROOF' HAIR COLOURING

A kit that contains everything necessary for applying

A NEW permanent hair colour, Colorsilk, of Revlon International Corporation, 86 Brook Street, London, W.1, is applied like a shampoo and includes a conditioner. Feature of the pack is that it includes everything that is needed for applying the colour: applicator bottle, cream colour releaser, hair colouring and protective gloves. The user is offered a choice of twelve shades to lighten or darken hair or cover grey. Used regularly (for example, every six weeks or so to cover new growth), Colorsilk is claimed to give the same "natural looking, glowing" shades every time. Application is simple and takes little time (15-30 minutes depending upon the shade). A counter display chart for the dealer and the back of each box clearly indicates what each shade will accomplish. With Colorsilk the hair may be lightened or darkened by several degrees. Shades are snow blonde (palest ash), baby blonde (light ash), wheat blonde (soft golden), smoky blonde (dark ash), toffee brown (light ash), young (warm) brown, midnite (rich deep) brown, strawberry blonde (delicate Titian), honey (light

bright) auburn, terra copper (dark burnished auburn), black and brown.



Josephine, one of a series of "trend-setting" coiffures presented at the launching of Colorsilk.

'NO-NONSENSE' MAKE-UP FOR TEENAGERS

Mary Quant sets out to cater for £22 million market

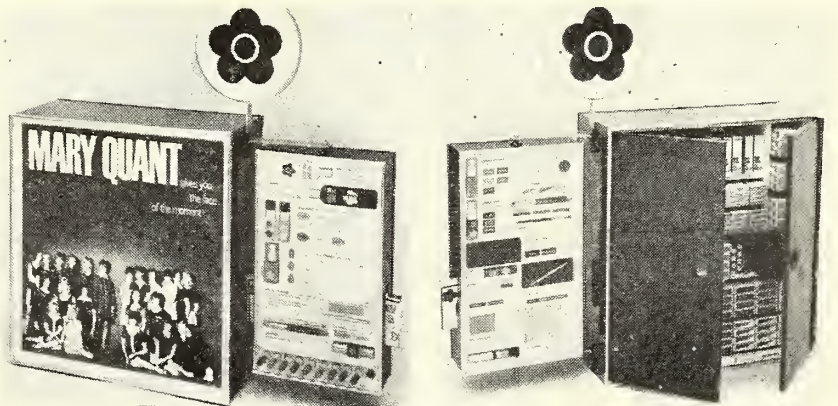
MARY Quant, whose reputation as a designer of clothes for teen-age girls is unique, has launched, under an associate company, Mary Quant Cosmetics, Ltd., Chelsea, London, S.W.3, a cosmetic series specially formulated for the 3½-million girls in the 18-28 years group in the United Kingdom. The potential of the market is put at £22 millions in 1966, and it is claimed that "more of this group use cosmetics than any other group; they use more cosmetics than any other age group; they spend more per head than any other group; and they already buy over 60 per cent. of all eye products." The Mary Quant policy is to give them "no-nonsense make-up with everything they need, nothing they don't need for the face of today."

The range comprises lipsticks and

brush lipsticks and refills in six basic colours only; lip-shaper pencil, lip brush, nail polish and nail make-up (two colours make one), liquid eye shadow, eye shapers (pressed shadows with brush), liquid and cake liners with brush, eye pencil and eye brush, liquid mascara and refill, block mascara with brush, "Starkers" nude make-up, "Face Lighter," "Face Sharpeners," "Face Final" (clear powder finish) and face brush case.

Distribution, on an exclusive agency basis, is limited to department stores and pharmacies, and it is understood that the number of chemist outlets will be restricted to about 10 per cent. of the entries in the Pharmaceutical Society's register of premises.

Distributors are Myram Picker, Ltd., Hook Rise, Surbiton, Surrey.



Front and rear of combined stock case and double-sided swivelling demonstration panel.

BRANCH EVENTS

HARROW

Health Centres

WITH one exception those retail pharmacists who attended the March meeting of the Harrow and District Branch of the Pharmaceutical Society, held at Hillingdon, Middlesex, appeared to have no strong feelings on whether a new health centre to be built by the London borough of Hillingdon should have facilities for pharmaceutical services or not. They were told by the borough's medical officer of health (Dr. O. C. Dobson), during an address on medical facilities and development in the borough, that the local council had put on record its determination to provide a health centre at the appropriate time. When that time would be depended on when the Government gave the go-ahead to spend the money, and on when a suitable site could be acquired. How big the centre would be had not been decided. Neither was it known whether pharmaceutical services would be provided there, and he invited members of the audience to give him their views. Only Mr. L. P. Emerson (a member of the branch committee) spoke up against such provision. He said there were plenty of pharmacies within the borough and they could easily handle all the dispensing. Dr. Dobson said that he knew the difficulties hospitals had in obtaining sufficient pharmacists, and he expected the same would be true of a health centre unless there was a considerable improvement in salaries. What, he asked, would members think of a suggestion that offers of tender to provide pharmaceutical services at the centre should be advertised? Mr. Emerson was of the opinion that it would be more costly to provide the service in that way than from the already established pharmacies. A big turnover of prescriptions would be necessary to make the service remunerative in the proposed centre.

WEST HAM, EAST METROPOLITAN Foresight and Generosity

MEMBERS of the West Ham Association of Pharmacists and East Metropolitan Branch of the Pharmaceutical Society were reminded on March 3 of their support, embodied in a resolution passed in 1905, of the decimal system, "subject to its being imposed gradually." Events in their 63-year-old history were being recalled by the president of the Society (Mr. J. C. Bloomfield) in a toast to the Association and Branch at their annual dinner and dance at the Cafe Royal. He made special mention of their strong support, totalling £2,000 over the years, for the Society's Benevolent and Birdsgrove House Funds, a loyalty much appreciated by the Council. [Later the M.C. announced that a further £50, the proceeds of a tombola, had been raised for Birdsgrove House.] Mr. Bloomfield said that the support of the Branch for the "Medicines — with Care" exhibition had been equally splendid. Acknowledging the toast the chairman (Mr. B. L. Beard), who earlier with Mrs. Beard had re-

ceived the guests, said that members were proud to have the Society's president with them a second time. Mr. Bloomfield had been a guest at the West Ham dinner soon after being elected to the Council, and in office had reached a high peak, especially at the Albert Hall meeting in July 1965. The face of pharmacy was changing and a new image was being born, said Mr. Beard, and the president's leadership had been impressive. The Branch had recently "exported" two of its secretaries (Messrs. Crossley and Knights), but the losses had been offset by "imports," notably of their new secretary, New Zealander Mr. George Wood. Dr. J. Finer, who proposed the toast "The Ladies," was a doubly appropriate

choice for doing so. Not only is he the chairman of the Stratford division, British Medical Association, but his wedding reception, thirty years ago, had been held in the Napoleon room in which the dinner was taking place. (Looking at Mrs. Finer one could have supposed it was but yesterday). Dr. Finer introduced a more serious note than is usual by urging married ladies with a pharmaceutical qualification to take part-time posts in order to cope with serious under-manning within the profession. The graceful response by the secretary's wife (Mrs. K. Wood) showed that the Branch had gained a bonus on its "import," just as the work the social secretary (Mr. D. C. Evans) gains a premium from the calligraphy of his wife, who once again made a thing of beauty (if not a joy for ever) of the seating-plan.

Correspondence

Letters when received must bear the name and address of the sender, not necessarily for publication. The Editor does not hold himself responsible for the views expressed.

Support Deserved

SIR,—Having followed all the letters comments, poets' verses, etc., in the *C. & D.* during the past few weeks on the subject of chemists' desired monopolies of goods, I found it refreshing to see a manufacturer state in black and white its policies regarding supermarkets and grocery outlets. Surely it is up to every private chemist to find out who his friends are in this field and to give them 100 per cent. support. There are still a few firms like Rexall, Ltd., who will always remain "chemist only." But I am sure that they desperately require our support too.

J. RAYNER,
Morecambe

England Awake

SIR,—I would like to say something with regard to your letters published in the *C. & D.*, March 12, p. 259, about T.C.P. and supermarkets. The practice of cutting the pharmacist to ribbons is a very old one, but ironically enough this practice is only done in the English speaking countries of the world or former British Colonies, Protectorates and Dominions. Elsewhere in Europe or European-influenced countries (e.g., Portuguese E. & W. Africa, Congo, etc.) only chemists sell medicines and allied products. It is high time the British did something to follow European ideas and forget that they are the only people that are right. It certainly would help chemists who in 20 years from now will be prehistoric like the Dodo.

B. BENNETT,
Kitwe, Zambia

SIR,—Today I received a visit from our T.C.P. representative. The sales director no doubt mislaid the two letters informing him that such visits would be wasting the firm's time! I learn that sales are bigger and better than ever, I am almost unique in continuing to swim against the tide, now turning and again flowing in their favour. In fighting the cause of N.P.U. products for pharmacy I am backing a

losing cause. Indeed I wonder am I considered worthy of a call? I think of the paper products, toiletries, baby foods, household names, that two years ago massed our shelves. Today they sell in greater quantities than ever from the same shelves. ONLY the names are different, the margins secure, they do not appear in my neighbouring grocer, tobacconist, or paper shop. Myself and my competent staff neither lack faith in them, nor the ability to communicate it to our customers. Unique? I hope numbers of my retail colleagues are not led to imagine they are unique, too.

E. W. S. BURROWS,
Haywards Heath, Sussex

Tooth-paste "Jungle"

SIR,—You may or may not have heard of the "cement jungle" and the "blackboard jungle" but my shelves display yet another . . . the "tooth-paste jungle." Most of the "pop" dentifrices are marked "three-pence off," "fourpence off" or "six-pence off," and that seems to have become a deplorable, illogical and regular feature; but when Gibbs SR introduce a giant size with "one-shilling off" I begin to wonder. Is this "the end" or is it just the beginning of a whole new range of special offers? For, if a new pack can be *born* with "one shilling off," why not 2s. 6d. or even more "off"? With no fixed price there is nothing to prevent general runaway inflation of so-called reductions. All this carry-on has nothing to do with normal retail trading but is a gimmick for super-markets and the like, where the customer is so baffled with non-science that he doesn't know whether he is getting a bargain or not (or indeed whether he is coming or going). You may write to Messrs. Gibbs (or any of the others), as I did, and ask for a lucid explanation in unambiguous black and white, but all you will get, as I got, is ". . . we will be happy to ask our representative to call and discuss our prices and terms of trading." Like the philanderer, the motto seems to be "Never put it in writing."

MORNING GLORY



CHEMIST AND DRUGGIST

For Retailer, Wholesaler and Manufacturer

ESTABLISHED 1859

Published weekly at

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TELEPHONE: CENTRAL 6565

Matters of Pharmaceutical Conscience

A CRITICAL scrutiny of the claims made for medicines offered to the public was demanded at a one-day regional conference of Yorkshire West Riding pharmacists in Leeds, on March 22 (see p. 326). An urgent plea was made that the Pharmaceutical Society should set up a body to investigate the composition and claims made for such medicines and, where appropriate, to recommend or require the manufacturer to effect amendments. If, in the event, the manufacturer did not do so, thereby bringing his product or the advertising claims into line with modern pharmaceutical thought, then pharmacists in general practice should be recommended not to stock or sell the offending preparations. The plea was the outcome of discussion on a paper on the advertising of medicines by Mr. W. K. Fitch (an assistant secretary of the Pharmaceutical Society), many of whose hearers subscribed to the view that present codes of advertising standards were not, so far as medicines were concerned, effectively protecting the public.

No resolutions were passed at the conference, and no votes recorded, but agreement appeared general that the pharmacist should be recognised as the distributor of medicines and that he must accept the corresponding responsibility for guiding customers in their purchases of medicines. A minority, it is true, disliked the suggestion that any pharmacist should act individually against medicines for which claims he considered extravagant were being made. The point of view of that minority was that pharmacists should receive central guidance from a sort of pharmaceutical Dunlop Committee, in much the same way that doctors are sent the *Prescriber's Journal* by the Ministry of Health. It may be that, when it is revealed to the public at large, the proposed legislation on medicines will be seen to introduce powers for dealing with the composition, claims and advertising of medicinal preparations, but so far the proposals have appeared only on documents marked "private and confidential."

In all probability the feelings expressed at the West Riding conference reflect the views of a large sector of the Society's membership, and the Council of the Society cannot ignore the growing restiveness that is evident in so many pharmacists, who feel that the situation as it exists at present is being allowed to continue apparently unchallenged.

The new Council, whatever its constitution after the forthcoming election, should deal urgently with the

problem, which is an important matter of pharmaceutical conscience. Action cannot be withheld merely on the grounds that some political action is proposed at some unspecified future date.

Message and Medium

At a time when pharmacists are complaining, rightly, at moves made by the medical profession that involve usurping the responsibility for pharmaceutical activities—as in the recent suggestion (*C. & D.*, March 19, p. 268) that doctors in a privately organised health scheme might dispense for their patients—it may seem to many pharmacists odd and regrettable that some of their colleagues should currently be making use of the correspondence columns of the medical Press to comment on matters that are essentially pharmaceutical. Pharmaceutical channels exist in plenty in which such problems would more properly be aired.

Two recent instances have come to our notice, the first involving a letter from a hospital chief pharmacist to the *Lancet* (March 5) warning prescribers to beware of deposits that may be present in molar concentration infusions of sodium bicarbonate. Surely a more appropriate way of giving such a warning would have been by letter addressed to other hospital pharmacists, who could then pass it on to their medical colleagues. Instead, the original *Lancet* letter prompted two other correspondents to reply, one of them being another chief pharmacist, who gave a method of formulation that overcomes the deposit problem, the other from the Pharmaceutical Society's Department of Pharmaceutical Sciences giving the Department's findings on the nature of the deposit, plus an alternative method of preparation to remove it. (The correspondence has been summarised each week in *THE CHEMIST AND DRUGGIST* under "Prescribers' Press").

Now, in the latest issue of the *British Medical Journal* (March 26), workers at Brighton school of pharmacy have been reporting on investigations they have carried out into the salicylic-acid content of aspirin mixtures (see p. 346). Their message that there are grounds for not prescribing aqueous suspensions of aspirin is, of course, properly addressed to the medical profession, but their contention that pharmacists sometimes fail to comply with B.P.C. monograph instructions by not "freshly preparing" mixtures of aspirin is, we believe, misplaced as matter to be published in a medical journal. If it is true—as the Brighton tests suggest—that the six samples obtained from retail pharmacies were prepared at least two weeks before supply, then it is the pharmacist's house that has to be set in order, and the pharmacist who must be prompted to take action. For that to happen, the material must appear in publications circulating among pharmacists, not doctors. It would seem wrong to compel pharmacists to consult the medical Press for reports upon pharmaceutical investigations.

Sauce for the Goose

UNDERSTANDABLY pharmacists continue to feel that, if they are to be subject to drug-testing schemes, as they must be under the National Health Service then, to the extent to which they provide dispensed medicines for patients, doctors should be equally open to test. The feeling is keenest in rural areas where, of course, the

amount of doctors' dispensing involved is much greater than in towns. In one county, for example, with sixty-five chemists on the list of contractors, 211,258 persons received their medicines from pharmacies and 170,044 from the 139 dispensing doctors. In other words, 65 per cent. of patients in that county receive medicines covered by the testing scheme and 55 per cent. do not. Yet, as a correspondent has pointed out to us, some, at

least, of those doctors elect to have their prescriptions priced out under the Drug Tariff in the same way as chemist contractors. If they enjoy the privileges of "club membership," should they not also share in its responsibilities? The Ministry of Health has been sufficiently ingenious in the past to deal with such problems in relation to chemists, and should have no great difficulty in devising similar procedures for doctors.

HOSPITAL PHARMACY FORUM THE WARD PHARMACIST

By a HOSPITAL PHARMACIST

AMONGST the more important papers read at the conference of Scottish Hospital Pharmacists (*C. & D.*, March 12, p. 252) were those by Dr. J. Crooks and Mr. G. Calder on "The Place of the Hospital Pharmacist at Ward Level." Dr. Crooks referred to the high incidence of medication errors in hospital. At Aberdeen a new system for the prescribing and administration of drugs had been devised, and it had reduced the incidence of such errors from 20 per cent. to 10 per cent. The new procedure required the presence of a pharmacist on the wards at certain specific times. The function of the pharmacist in hospital practice, said Dr. Crooks, had radically changed because of the pharmaceutical revolution. Today most drugs were commercially prepared and prepacked, and as a result, the hospital pharmacy had tended to degenerate into a supply department. It was wasteful not to use the pharmacist's special skill and training where they were most required, namely on the ward. Mr. Calder said that members of the pharmaceutical staff at the Aberdeen Royal Infirmary had now been working in a ward for over three months. The pharmacist, he said, was trained to read and to interpret a prescription given to him by a clinician, and the only satisfactory place to do that was at ward level. That was where the decision on drug treatment was taken. It was where the prescription was born and where the decision on dosage and method of administration was taken. It was also the place where the drug was administered to the patient. If the pharmacist was to play his full rôle in that sequence of events he must be present where they occurred.

Seemingly Unconvinced

It would seem from the report on the discussion which followed the presentation of the papers that the hospital pharmacists who attended the conference were not entirely convinced about the merits of the proposals put forward. Nevertheless they must be regarded as a serious contribution to a problem which is at present causing a good deal of heart searching in hospital pharmaceutical circles, namely the rôle of the pharmacist as an adviser on drugs and their properties. For a long time hospital pharmacists have laid increasing stress on the importance of the pharmacy as an information centre. Originally the service provided was usually limited to the answering of inquiries for simple factual data (dose, presentation, price and such contraindications and side effects as were listed in the manufacturer's literature). However, in recent years that kind of information has become readily available from card-index systems and other media which circulate extensively within the medical profession, and that has led to a falling off in demand. Today the hospital pharmacist sees himself as playing a much more sophisticated rôle, i.e. that of an expert adviser on drugs and their use in the treatment of disease. He is no longer content to be regarded mainly as a dispenser of prescriptions, and the instant reaction produced by the recommendation of the Tunbridge Committee on the "Standardisation of Hospital Medical Records" that he should see only the current prescription instead of

a complete record of treatment provides abundant evidence of the change of outlook that has taken place. While, however, there can be no dispute about the ability of the pharmacist to provide simple factual information about drugs or to call the attention of prescribers to possible overdoses, the extension of his responsibilities to include advice on medication raises more controversial issues.

Growing Need for Advice

Therapeutics is no longer a simple subject which the average doctor can take in his stride, and there is a growing realisation within the medical profession of the need for independent and expert advice on the use of drugs. Sir John McMichael, who is professor of medicine at Hammersmith post-graduate medical school, took up the theme when he gave the inaugural address at the opening of the new Academic Centre at Whittington Hospital. The doctor, he said, had no one to whom he could turn for expert advice on the "flood of new, powerful and frequently valuable drugs now available to him" and he urged a vast development of clinical pharmacology in the medical schools. The *Lancet* referred to the same problem in a recent leading article and suggested a closer association between basic pharmacology and clinical medicine as a solution.

It will be noted that in neither case was any reference made to the help which could be given by the pharmacist. That is not altogether surprising. Although the advisory functions of the pharmacist are freely discussed in the pharmaceutical Press and are now seen as an important part of the duty of the hospital pharmacist, virtually no progress has been made in putting over the idea to the organised medical profession. Admittedly many doctors do realise the benefits to be derived from a consultation with the pharmacist before deciding on treatment, but such consultations are invariably made on an informal basis. The profession as a whole has so far given little indication that it is prepared to accept the pharmacist as a specialist officer with rights of full membership in the therapeutic team.

The "Aberdeen experiment," therefore, takes on a special significance. Here it would seem that the advisory functions of the pharmacist have been officially recognised, but even Dr. Crooks, who was anxious to use his special skills and knowledge to the best advantage, took care to emphasise that the ward pharmacist's contact with the medical staff should be purely informal. He should not, he thought, take part in the ward rounds because "this would be exceedingly boring for him and a complete waste of his time." That may or may not be true, but it is on the ward round, when all the senior medical staff are present, that treatment is discussed and decisions are made. If the pharmacist does not participate, then presumably he must rely on getting any details he may need from a junior member of the team after the round is over and the senior staff have left. Pharmacy, we like to believe, is a profession equal to, and independent of, medicine but the concept of the ward pharmacist as it has been interpreted at Aberdeen would not seem to be in accord with this

view. Because of the special circumstances that exist in Scottish Hospitals, where the pharmacy normally supplies drugs on the requisitions of the nursing staff, and where the pharmacist only rarely sees the actual prescription, it is nevertheless a considerable improvement. One cannot, unfortunately, avoid the suspicion that the procedure was primarily designed to reduce medication errors and that the new rôle assigned to the pharmacist was only incidental. It is not difficult to understand why "other wards were clamouring for the service to be extended to them." One would like to know how much of that clamour came from senior members of the medical staff, who feel the need for advice from the pharmacist, and how much from the nursing staff, who see it as a means to unload work.

Nevertheless one would not wish to condemn the new procedure out of hand. The reduction of medication errors is a laudable objective in itself, and the pharmacist, no less than his medical and nursing colleagues, must be prepared to play his part. On the other hand it is important that the objective should not be achieved by requiring him to give up his claim to the status of a specialist professional officer and turning him into a kind of "doctor's mate." In hospitals south of the border, where it is much more common for the pharmacist to see the complete record of medication and to dispense from the original prescription, there will probably be even less enthusiasm for the proposal.

Implementation of the recommendations of the Tunbridge Committee as they stand will inevitably bring about a profound change. The likelihood is that they will be so implemented unless the Guild can put forward an alternative that will achieve the main object of the recommendations, namely removal of the necessity for the record

of medication to leave the ward. The concept of the ward pharmacist obviously seems to offer an easy way out of the dilemma, and it is possible that some pharmacists might be tempted to recommend the Aberdeen procedure to their governing bodies without paying due regard to possible repercussions on the status of the pharmacist. In that connection it would be well to bear in mind that should clinical pharmacology, like clinical pathology, become a medical speciality the ward pharmacist will no longer be required to provide advice as well as medicine. Admittedly he will continue to copy out prescriptions and to take the dispensed medicines back to the ward, but one can reasonably ask whether a university degree and a professional qualification are necessary for the performance of those tasks.

Pharmacy has poked its nose into other people's business on too many occasions in the past, and has derived little if any permanent benefit from the exercise. If the supervision of medication at ward level is now to be a pharmaceutical responsibility it is essential to agree first of all with the medical and nursing professions the precise definition of the rôle he is to play. We know from past experience that, in the absence of such an agreement, the pharmacist could well be placed in an untenable position.

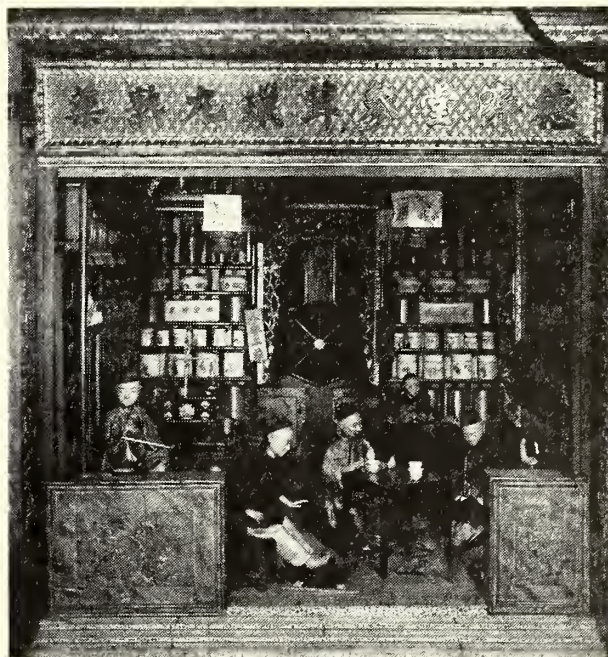
Finally it is important to bear in mind that, once the new procedure were initiated, the whole system of drug distribution would break down unless the visits to the wards were maintained. During periods of staff shortage the ward pharmacist service would, of necessity, have to be given top priority and in those circumstances the development of a situation may be imagined in which it was no longer possible to provide adequate supervision over other equally important aspects of the department's activities.

ONWARD FROM GALEN

SIDELINES OF CURRENT COMMENT

★ MEDICINE OF THE EAST EXHIBITED IN THE WEST ★

CENTREPIECE of a "Chinese Medicine" exhibition that opened at the Wellcome Historical Medical Museum, Euston Road, London, N.W.1, on March 28, is a model of a prominent nineteenth century Canton pharmacy. Made around 1881, the model was presented to the Museum in 1913 by the Pharmaceutical Society of Great Britain. It has a characteristic open front giving view of the interior, and shows the bearded proprietor serving two customers with tea—"a courtesy frequently provided," to quote from the exhibition catalogue. The assistant in the foreground is grinding drugs in a boat-shaped mortar operated by his feet. Towards the back of the shop is a large herb cutter and through the partition at the rear is an altar, on which incense was frequently burned to the god of medicine. Elegant drug containers of pewter and porcelain line the walls. The catalogue explains that Chinese pharmacy has a continuous empirical tradition from at least the third century B.C., though possibly half the drugs described in the traditional literature may satisfy modern scientific criteria of therapeutic value. Among the specimens shown of drugs well known to Western medicine are ephedra (long used by the Chinese for its astringent and diaphoretic properties), *Cinnamomum cassia* bark, rhubarb and nutmeg. There are other more exotic examples of the Chinese physician's armamentarium, and it would only be a strong-willed patient, maybe, who would call a second time to be administered of the gall bladder of an executed Chinese criminal (stuffed with rice it was held valuable in certain severe illnesses). Tortoiseshell, swallows' nests, deer's horn and frogs also had their uses. A principal resource of the Chinese physician is acupuncture, a procedure involving the insertion of a number of fine needles into the skin at precise points on the body (indicated by charts worked out through the ages). The practice has recently spread to Europe, almost as a cult, and though no satisfactory scienti-



fic explanation has yet been advanced for its use, intensive work upon it is now going on in China and Japan. Most of the results so far obtained point strongly to stimulatory effects on the autonomic nervous system. Examples of instruments used for it and other procedures are included in the exhibition, which is open from 10 a.m. to 5 p.m., Monday to Friday (Bank holidays excepted) until the end of the year.

GUIDE TO NEW MEDICAMENTS

Information about proprietary products supplied principally on prescription. Reprints on perforated gummed paper for affixing to index cards are obtainable from the Editor. Notes on the products are given on p. 345.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, April 2, 1966

DYTRANSIN capsules

MANUFACTURER: Boots Pure Drug Co., Ltd., Station Street, Nottingham.

DESCRIPTION: Powder blue opaque/dark grey opaque capsules, each containing 250 mgm. of ibufenac (4-isobutylphenylacetic acid), a white crystalline powder.

INDICATIONS: Acute and chronic rheumatoid arthritis, ankylosing spondylitis, osteoarthritis and other forms of chronic rheumatic disease.

DOSAGE: In most cases the optimum adult dosage in rheumatoid arthritis is 2 gm. (eight capsules) daily in divided doses. If necessary dosage may be increased to 3 gm. (twelve capsules) daily in divided doses. As a rule, Dytransin should be taken after meals, but considerable relief from early morning stiffness may be gained by taking the drug immediately on awakening.

PRECAUTIONS: Patients receiving Dytransin must be under regular medical supervision. It is recommended that monthly serum transaminase estimations should be carried out, with other liver function tests where indicated. Jaundice has occurred in less than 1 per cent. of treated patients.

PACKS: Containers of 100 and 500.

SUPPLY RESTRICTIONS: All patients receiving Dytransin must be under regular medical supervision.

FIRST ISSUED: April 1966.

PLACING ON C. & D. TABLET AND CAPSULE IDENTIFICATION GUIDE: Two-colour, D5, F12, 24/32. —, —.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, April 2, 1966

GONDAFON tablets

MANUFACTURER: Schering, A.G., Berlin. DISTRIBUTOR: Pharmaceuticals (London), Ltd., Victoria Way, Burgess Hill, Sussex.

DESCRIPTION: Scored, oblong, white, uncoated tablets each containing 0.5 gm. of glymidine.

INDICATIONS: Treatment of maturity onset diabetes.

CONTRAINDICATIONS: Hyperglycemic coma and ketosis; pregnancy; severe stress conditions; severe and progressive late complications of diabetes, e.g., retinopathy, gangrene, nephrosclerosis.

DOSAGE: For stabilisation, 0.5–1.5 gm. daily with breakfast. For maintenance, 0.5–1.0 gm. daily with breakfast. The tablets should be swallowed whole with liquid.

PACKS: Pocket pack of twenty tablets and containers of 100 and 500.

SUPPLY RESTRICTIONS: Treat as P.I., S.4b.

FIRST ISSUED: March 1966.

PLACING ON C. & D. TABLET AND CAPSULE IDENTIFICATION GUIDE: White, 22/32, P, Ob, Cv/Cv, —, 310/310.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, April 2, 1966

IMPERACIN tablets and capsules

MANUFACTURER: Imperial Chemical Industries, Ltd., Pharmaceuticals Division, Alderley Park, Macclesfield, Ches.

DESCRIPTION: Yellow, sugar-coated tablets, each containing 250 mgm. of oxytetracycline dihydrate and yellow and grey capsules each containing 250 mgm. of oxytetracycline hydrochloride.

INDICATIONS: Systemic infections due to a wide range of pathogens, particularly those associated with disorders of the respiratory tract.

CONTRAINDICATIONS: Hepatic or renal dysfunction. History of tetracycline sensitivity.

DOSAGE: Adults: Acute infections, one to two tablets or capsules four times daily. Prophylaxis: One tablet or capsule twice or three times daily.

SIDE EFFECTS: May cause abdominal discomfort and diarrhoea. Overgrowth with resistant organisms may cause glossitis, rectal and vaginal irritation.

SHELF LIFE: Expiry date should be noted.

PACKS: Tablets and capsules in containers of sixteen, 100 and 1,000.

SUPPLY RESTRICTIONS: Therapeutic Substances Act.

FIRST ISSUED: March 1966.

PLACING ON C. & D. TABLET AND CAPSULE IDENTIFICATION GUIDE: Tablets: D3, 15/32, C, R, Cv/Cv, —, —.
Capsules: Two-colour, hard, F12, D3, 24/32, —, —.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, April 2, 1966

OTRIVINE-ANTISTIN spray and drops

MANUFACTURER: CIBA Laboratories, Ltd., Horsham, Sussex.

DESCRIPTION: Nasal spray and nasal drops of a colourless fluid, containing 0.05 per cent. w/v of xylometazoline hydrochloride and 0.5 per cent. w/v antazoline sulphate.

Nasal decongestant with topical antihistamine.

INDICATIONS: Hayfever and all forms of allergic rhinitis.

METHOD OF USE: One application of the spray or drops in each nostril as required.

STORAGE: Should be protected from heat.

PACKS: Nasal spray and drops in bottles of ½ fl. oz.

FIRST ISSUED: April 1966.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, April 2, 1966

PONOXYLAN ear drops

MANUFACTURER: West-Siltan Pharmaceuticals, Ltd., 65 Western Road, Hove, 3, Sussex.

DESCRIPTION: White suspension containing 10 per cent. porynoxylin in a glycerin base (sodium citrate 1 mgm., sodium di-nonylsulphosuccinate 0.1 mgm., propylene glycol 0.1 ml, glycerol to 1 ml.).

INDICATIONS: Primary indications: Otitis externa; otitis media. Secondary indications: Infected mastoid cavities; pre- and post-operative cleansing.

METHOD OF USE: Up to six drops may be instilled directly into the external auditory meatus or a wick may be saturated with drops and inserted into the external ear. Drops may be applied several times a day.

SHELF LIFE: Five years.

PACK: 15-ml dropper bottle with pipette.

SUPPLY RESTRICTIONS: Recommended on prescription only.

FIRST ISSUED: March 1966.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, April 2, 1966

SERIAL 28 tablets

MANUFACTURER: The British Drug Houses, Ltd., Graham Street, London, N.1.

DESCRIPTION: Plastic pack holding sixteen red tablets each containing 0.1 mgm. of ethinylestradiol, five white tablets containing 1 mgm. of megestrol acetate plus 0.1 mgm. of ethinylestradiol, and seven blue tablets containing lactose.

INDICATIONS: Inhibition of ovulation.

CONTRAINDICATIONS: Known or suspected malignancy of breast or reproductive tract; uterine fibroids; history of, or pre-disposition to, thrombophlebitis.

DOSAGE: One tablet daily, commencing initially on fifth day of menstrual cycle (counting the first day of bleeding as day one) and starting with one red tablet daily for sixteen days, followed by one white tablet daily for five days, then one blue tablet daily for seven days. A new course starts on the day immediately following that on which the last blue tablet was taken.

STORAGE: Should be stored in a cool, dry place.

PACK: Plastic container holding twenty-eight tablets (sixteen red, five white, seven blue) in foil-backed "bubble" pack.

SUPPLY RESTRICTIONS: P.I. S.4b.

FIRST ISSUED: March 1966.

PLACING ON C. & D. TABLET AND CAPSULE IDENTIFICATION GUIDE: Red tablets: C.13, 9/32, C, R, Cv/Cv, —, —.
White tablets: White, 9/32, C, R, Cv/Cv, —, —.
Blue tablets: A.5, 9/32, C, R, Cv/Cv, —, —.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, April 2, 1966

XYLOTOX spray

MANUFACTURER: Pharmaceutical Manufacturing Co., Ashley Road, Epsom, Surrey.

DESCRIPTION: Local anaesthetic spray for topical application containing 8.5 gm. of lignocaine, 0.042 gm. of cetrimide with solvent and propellant to 85 gm.

INDICATIONS: Surface anaesthesia of mucous membranes in dental practice.

METHOD OF USE: Proportionate to area to be anaesthetised. The spray is delivered in metered doses each containing 5 mgm. of lignocaine.

NOTES: The total dosage should not exceed 200 mgm. of lignocaine (forty "shots").

PACK: Pressurised container of 85 gm.

SUPPLY RESTRICTIONS: For professional use only.

FIRST ISSUED: January 1966.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, April 2, 1966

ONCOVIN injection

MANUFACTURER: Eli Lilly & Co., Ltd., Kingsclere Road, Basingstoke, Hants.

DESCRIPTION: Ampoule containing 1 mgm. of vincristine sulphate and 10 mgm. of lactose, accompanied by an ampoule of 10 c.c. of diluting solution, containing 90 mgm. of sodium chloride with 0.9 per cent. of benzyl alcohol as preservative.

INDICATIONS: Acute leukaemias of children and certain other malignant conditions.

CONTRAINDICATIONS: See manufacturer's literature.

DOSAGE: Weekly intravenous injections. First, 0.05 mgm./kilo; second 0.075 mgm./kilo, third 0.1 mgm./kilo, fourth 0.125 mgm./kilo up to maximum of 0.15 mgm./kilo. Maintenance dosage level may be 0.05 to 0.075 mgm./kilo per week. N.B. This dosage is for acute leukaemia. United Kingdom literature, when available, will give dosage for other conditions. Doses of 0.01 mgm./kilo to 0.015 mgm./kilo have given satisfactory results.

SIDE EFFECTS: Chiefly neuromuscular disturbances e.g. sensory loss, paraesthesia, muscle wasting and constipation. Other complications e.g. leucopenia are usually of short duration.

STORAGE: The prepared solution may be stored in a refrigerator for fourteen days without significant loss of potency.

PACKS: Single ampoule in combination package with ampoule of diluent. SUPPLY RESTRICTIONS: Hospitals only.

FIRST ISSUED: February 1966.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, April 2, 1966

PREGFOL capsules

MANUFACTURER: John Wyeth & Brother, Ltd., Huntercombe Lane South, Taplow, Maidenhead, Berks.

DESCRIPTION: Oval, claret-coloured capsules each containing 200 mgm. of dried ferrous sulphate and 0.5 mgm. of folic acid. INDICATIONS: Prophylaxis and therapy of iron deficiency anaemia and megaloblastic anaemia of pregnancy.

DOSAGE: Prophylactic: one capsule daily. Therapeutic: one capsule three times a day.

PACK: Bottle of 100. FIRST ISSUED: March 1966.

PLACING ON C. & D. TABLET AND CAPSULE IDENTIFICATION GUIDE: B.1, 16/32, S, El, —, —, —.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, April 2, 1966

RYNABOND tablets

MANUFACTURER: Fisons Pharmaceuticals, Ltd., Loughborough, Leics.

DESCRIPTION: Buff-coloured, oblong tablets incorporating the Rynabond sustained-action principle. Each tablet contains 25 mgm. of phenylephrine tannate, 37.5 mgm. of pheniramine tannate and 25 mgm. of mepyramine tannate (equivalent to 10 mgm. of phenylephrine hydrochloride, 23 mgm. of pheniramine maleate and 16 mgm. of mepyramine maleate). INDICATIONS: Symptomatic relief of acute nasopharyngitis, sinusitis, rhinitis, hay fever, and other associated allergic conditions.

CONTRAINDICATIONS: Sensitivity to sympathomimetic agents.

DOSAGE: One or two tablets morning and evening.

SIDE EFFECTS: Those normally associated with antihistamines (dry mouth, drowsiness, etc.) are less likely to occur with the Rynabond sustained-action principle.

PACKS: Containers of thirty and 250.

SUPPLY RESTRICTIONS: P.I., S.7.

FIRST ISSUED: March 1966.

PLACING ON C. & D. TABLET AND CAPSULE IDENTIFICATION GUIDE: E.3, 20/32, P, Ob, Cv/Cv, —, —.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, April 2, 1966

VALIUM Roche capsules

MANUFACTURER: Roche Products, Ltd., 15 Manchester Square, London, W.1.

DESCRIPTION: White/blue capsules, marked "Roche 2," each containing 2 mgm. of diazepam and yellow/blue capsules, marked "Roche 5," each containing 5 mgm. of diazepam.

INDICATIONS, ETC.: As for Valium tablets.

PACKS: Containers of 100 and 500.

SUPPLY RESTRICTIONS: P.I., S.4B.

FIRST ISSUED: March 1966.

PLACING ON C. & D. TABLET AND CAPSULE IDENTIFICATION GUIDE: 2 mgm.: Two colour, hard, D5, W, 18/32, —, 190/190. 5 mgm.: Two-colour, hard, D5, D3, 18/32, —, 191/191.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, April 2, 1966

PENICALS 333 tablets and suspension

MANUFACTURER: Leo Laboratories, Ltd., Hayes, Middlesex.

DESCRIPTION: White scored tablets each containing 333 mgm. of penicillin V calcium (equivalent to 500,000 i.u.). Peppermint flavoured suspension containing in each 5 mls 333 mgm. of penicillin V calcium.

INDICATIONS: Infections caused by penicillin sensitive organisms. CONTRAINDICATIONS: Penicillin hypersensitivity.

DOSAGE: One tablet or one teaspoonful three to five times daily depending on the severity of the infection.

STORAGE: Should be kept in well closed containers which prevent the access of moisture and stored in a cool place.

SHELF LIFE: Two years.

PACKS: Tablets: Containers of 100, 250 and 500. Suspension: Bottle of 60 mls.

SUPPLY RESTRICTIONS: Therapeutic Substances Act.

FIRST ISSUED: March 1966.

PLACING ON C. & D. TABLET AND CAPSULE IDENTIFICATION GUIDE: White, 15/32, P, R, F/F, B2, H/-.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, April 2, 1966

PENICALS PEDIATRIC suspension

MANUFACTURER: Leo Laboratories, Ltd., Uxbridge Road, Hayes, Middlesex.

DESCRIPTION: Pink, raspberry flavoured suspension containing in each 5 mls 125 mgm. of penicillin V (as calcium salt).

INDICATIONS: Infections caused by penicillin sensitive organisms. CONTRAINDICATIONS: Penicillin hypersensitivity.

DOSAGE: One or two teaspoonfuls as directed by the physician.

SHELF LIFE: Two years.

PACKS: Bottle of 60 mls with plastic measure spoon.

SUPPLY RESTRICTIONS: Therapeutic Substances Act.

FIRST ISSUED: March 1966.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, April 2, 1966

SERENID tablets

MANUFACTURER: John Wyeth & Brother, Ltd., Huntercombe Lane South, Taplow, Maidenhead, Berks.

DESCRIPTION: Oxazepam, supplied as white tablets of 15 mgm. (scored) and 10 mgm. (not scored), each bearing strength on one side and the Wyeth shield on the other. Tranquilliser.

INDICATIONS: Control of stress symptoms: Anxiety, agitation, tension, irritability and related symptoms. May be used with anti-depressants for the control of anxiety in depressive states.

DOSAGE: 15 mgm. three or four times a day, increased to 30 mgm. for more severe symptoms. Patients over 65 years should receive 10 mgm. three times a day initially.

CONTRAINDICATIONS: Oxazepam should be given with care to patients who have shown idiosyncrasy to the other benzodiazepine derivatives. It is not indicated for the primary treatment of psychoses though it may prove of use as an adjunct to specific therapy.

PRECAUTIONS: Although hypotension has occurred only rarely, Serenid should be administered with caution to patients in whom a drop in blood pressure might lead to cardio-vascular complications. Patients should be cautioned against driving or operating dangerous machinery until it is known that they do not become drowsy or dizzy on Serenid therapy. They should also be warned that their tolerance to alcohol may be lowered. If treatment is prolonged, or a high dosage is administered, periodic measurement of hepatic and haemopoietic function should be carried out. Safety for use in pregnancy has not been established.

SIDE EFFECTS: Transient mild drowsiness is commonly seen in the first few days of therapy. If it persists, the dosage should be reduced. In a few instances, dizziness, vertigo, headache and rarely syncope have occurred either alone or together with drowsiness. Mild paradoxical reactions (excitement, etc.) have been reported in psychiatric patients. Also rare instances of minor diffuse skin rashes, nausea, lethargy, oedema, slurred speech, tremor and altered libido, all generally controlled with reduction of dosage.

PACKS: Both strengths in bottles of 100 and 500.

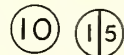
SUPPLY RESTRICTIONS: Treat as P.I., S.4B.

FIRST ISSUED: March 1966.

PLACING ON C. & D. TABLET AND CAPSULE IDENTIFICATION GUIDE:

10 mgm.: W, 8/32, P, R, F/F, B2, 236/334

15 mgm.: W, 10/32, P, R, F/F, B2, 236/335



Human Form and Function

EDINBURGH MEETING TOLD OF ATTEMPTS AT CLASSIFICATION

A REVIEW of the relationship between form and function was given to a meeting of the Scottish Department of the Pharmaceutical Society in Edinburgh recently. Speaking on "Significance of Shape," DR. J. H. TAYLOR (senior lecturer in physiology, University of St. Andrews) said that the relationship, taken in its broadest sense, had interested scientists of many disciplines for a long time.

The chemist, he said, examined the structure of the molecule and related it to its pharmacological effect. The comparative anatomist adopted the teleological attitude with its insistence upon the priority of function to structure as against the morphological attitude with its conviction of the priority of structure over function. In the field of human biology an increasing interest had developed in the idea that form and function in man might be closely related. The idea that certain physiques or body types were associated with an increased tendency to specific diseases had been held for a long time. Hippocrates recognised two fundamental physical types—the *phthisic habitus* and the *apoplectic habitus*. The first had a long thin body, dominated by the vertical dimension and with a curious susceptibility to tuberculosis. The latter was a short, thick-set individual with a predisposition to diseases of the vascular system.

Those types, said Dr. Taylor, were the forerunners of the later asthenic and pyknic types of Kretschmer in his observations on the incidence of schizophrenics and manic depressives. Through the centuries there had been many attempts to classify physique and to relate it to temperament, or to susceptibility to disease, or to specific capabilities. A modern classification was based on three variables. Originally those variables had been related to the three embryonic layers of ectoderm, mesoderm and endoderm, and were termed ectomorphy, mesomorphy and endomorphy. Thus individuals of different physiques were regarded as having those components in different proportions, the strength of each being graded from 1 as minimum to 7 as maximum. Given the degree of each component it was possible to plot the spatial relationships of different physiques.

Methods of Assessment

The methods of assessing the components were basically (a) anthropometry (using body measurements); (b) photogrammetry (using specially posed and processed photographs); and (c) Roentgenogrammetry (using specially posed x-rays).

Using those techniques, many studies had been carried out and interesting correlations had been observed in relation to responses to both physical and mental stress. Were they to be established the implications of the correlations would be tremendous. They would be of interest in education, preventive

medicine and the effective utilisation of man-power. It might be that the present physical parameters were too crude, and that new ones (perhaps biochemical), would prove more revealing. A start in that direction would be the re-evaluation of the physiological and biochemical norms and their relationship to physique. It might be that the selective criteria used in establishing dose-response curves in animals may be to some extent applicable to humans and that pharmacologists and pharmacists generally should, in their dealings with drugs take into account not only such considerations as age and sex of the patient but his body type as well.

MR. J. MYERS asked if people who started as ectomorphs and became fat prosperous business men would turn into endomorphs. DR. TAYLOR replied that an ectomorph would not turn into an endomorph but become a fat endomorph. Replying to DR. F. J. ELLIOTT, DR. TAYLOR said that the charts showing that the endomorphic type was more subject to gall-bladder disease confirmed the findings of clinicians. MR. B. G. TOWNSEND asked whether, through, for example, training for wrestling, it would be possible for an endomorphic type to become meso-

morphic. DR. TAYLOR replied that without the basic tendencies a mesomorphic type could not be developed. In answer to several questions regarding the application of the theory to drug addicts, people subjected to mental stress, hereditary factors, etc., DR. TAYLOR said that only two people were working on the subject and not much was yet known. PROFESSOR H. H. CAMPBELL suggested that it would be interesting to have a grouping into such categories of people who lived to old age without contracting diseases such as cancer.

On the usefulness of the theory in preventing disease, DR. TAYLOR felt that until much more was known than at present it could not give more than a warning of potentiality.

MR. I. S. SWANSON asked if by means of the type of grouping described it would be possible to select the type of education leading to occupations in which people were likely to be successful. DR. TAYLOR thought that would be worth trying out. DR. ELLIOTT proposed a vote of thanks to the speaker and said that he had found the address to be provocative, stimulating and interesting. On the motion of MR. F. HEPBURN a vote of thanks was accorded to the chairman.

THE PHARMACIST AND THE COMMUNITY

Royal Society of Health discussion in London

ADVICE on how best to help the general medical practitioner was given to the pharmaceutical industry, its representatives and retail pharmacists at a meeting organised by the Royal Society of Health in London on March 17. DR. W. P. THOMSON, a general medical practitioner in Edinburgh, who gave the advice, was taking part in a panel discussion on "The Role of the Pharmacist in the Community" arranged by the Society's pharmaceutical group.

Dr. Thomson advised the industry to have new drug assessments carried out in hospitals whenever possible rather than to try them out in general practice. Manufacturers should choose as representatives persons with a good basic personality, preferably pharmacists, who alone had the real background to the products. The representative should ask himself: "What am I trying to replace in this doctor's prescribing?" He should read round his subject and know what trials were going on in local hospitals. It was no use trying to sell an antibiotic until the local bacteriologist had been seen, so that sensitivity discs could be made available.

The general practitioner in pharmacy, who was seen and used most by the medical practitioner, was judged by his dispensing. Despite what might be said about container allowances, the speaker was annoyed when he saw in a patient's house a valuable product that had been dispensed in a little cardboard container. Storage of products was also sometimes incorrect. Calf

lymph, for example, had been known to be stored for three days on a shelf in a pharmacy. Bad storage, he alleged, was cause of the 50 per cent. failure rate he had been having with vaccinations.

Other members of the panel each looked at the evening's topic from a pharmaceutical standpoint. The chairman (PROFESSOR A. M. COOK, school of pharmacy, University of London) said that any pharmacist wishing to teach must take another qualification before starting research in his speciality. It was difficult to hold the attention of the university student unless the lecturer really knew his subject—and that meant being engaged in research. MR. A. R. RITCHIE (managing director, Macarthy's, Ltd.) outlined the rôle of the modern pharmaceutical wholesaler. The functions of the old "drug houses"—which had gone over to the production of "ethicals"—had been taken over, he said, by wholesalers able to market also the inexpensive Drug Tariff and pharmacopoeial drugs.

The Younger Pharmacist a "Specialist"

Speaking as a general practitioner of pharmacy, MR. H. G. MOSS (chairman, E. Moss, Ltd.) said that the younger pharmacist was a specialist, who could advise the doctor on drugs, and the new doctor-pharmacist relationship that had developed was more satisfying than the old "mystique" of dispensing. MR. S. E. HALL (pharmacist on the Committee on Safety of Drugs) summarised the events that had

led to the setting-up of the "Dunlop" Committee and said that all the objections to the voluntary system of control (as voiced by Sir Hugh Linstead and Mr. J. B. Grosset in their minority report to the Cohen committee report that recommended the present machinery) had been met—except that there was no control of manufacture. No company had refused to co-operate with the Committee, and there had been difficulties only with companies "on the fringe." The Committee had said of many submitted products "We don't think you should market," but it was possible that manufacturers had put up for independent assessment products

they had not seriously thought of marketing.

The hospital pharmacist's view was put by MR. T. R. WILLIAMS (chief pharmacist, University College Hospital, London), who underlined the new rôle of the pharmacist in "screening" prescriptions in relation to dosage according to age, drug interactions, etc. Prescribing must, he held, remain the responsibility of the doctor, since it was intimately connected with diagnosis and follow-up. But hospital dispensing might be arranged to allow for work checking, one person screening the prescription, a second (perhaps newly qualified) assembling the drugs and

a third checking the work of the other two. MR. S. W. KIPLING (marketing director, Geigy (U.K.), Ltd., pharmaceutical division) claimed that the pharmaceutical industry could offer the pharmacist everything he needed in a career, whether in research, production or in marketing. There were particularly opportunities in marketing, because companies generally preferred in that sphere pharmacists who "have an inherent conscientiousness and will not play for the short term."

During the discussion MR. SIMMONDS, a retail pharmacist, argued that the question of consultation between doctors and pharmacists did not arise. The doctor had his own armamentarium of drugs and obtained his information from representatives. Working as a "team" had to begin from the doctor. Mr. Simmonds regretted that the speakers had not discussed the distribution of health literature, and on that point he was later answered by PROFESSOR COOK who held that the pharmacy should rather be a centre for health information, from which the public could be directed to the proper source for the information required. When another questioner maintained that therapeutics was undertaught in pharmacy schools, Professor Cook said he believed that to be the result of a short-sighted policy on the part of medical academics. Any attempt to introduce therapeutics (under that name) into the pharmacy course had met with immediate opposition.

PHOTOGRAPHY AND THE PHARMACY

"Never-ending opportunities"

"THERE should be a photographic department in every pharmacy," said Mr. A. Page (editor, *Photographic Retailer*) when he addressed a meeting of members of the Bournemouth Branch of the National Pharmaceutical Union recently. Photography, said Mr. Page, offered never-ending opportunities for selling equipment. The sale of a camera led to the sale of a film, the sale of developing dishes to the sale of developers, paper or fixers, and so on. Both window and departmental space should be devoted to photographic equipment and advertising material at all times of the year, so as to identify the pharmacy as a photographic chemist's. "Developing and printing is the life blood of the photo trade," said the speaker. "The customer comes into your shop three times; first to buy the film, secondly to have it processed, and thirdly to collect the finished work."

The progressive dealer, he said, "would discuss the results with his customer, encourage him to have additional enlargements, and finally sell him his next film." Developing and printing required no stock and no credit, and gave a full 33½ per cent. profit. "Only an undertaker gets more profit and then the customer supplies the end product!" There was no "season" for photographic business. Films and equipment could be sold all the year round, thanks to faster films and flash.

Contact with Customers

To overcome the difficulty of finding time to spend on camera sales when a pharmacist's time was taken up with professional work, Mr. Page recommended Instamatic and Super-8 equipment, which, he said, was both quick and easy to sell, while the customer obtained good results that encouraged him to take more pictures. Pharmacists had a personal contact that made it easy for them to sell equipment to their regular customers. Outlining his idea of the perfect sales gambit, Mr. Page said "Receive the customer with a smile of welcome and inquire what he would like. Help him to select the equipment most suitable to his requirements, taking careful note of his wishes. It is most important to allow the customer to handle the goods, which should be properly displayed. Then should come the actual sale, but don't let the customer sell the goods

back to you! See if there are any accompanying items which the customer requires. . . . Finally commend the customer upon his purchase and thank him for his custom."

More photographic goods should be sold to women, who had been estimated to influence 90 per cent. of the world's selling. The teenage market should also be broken into. Members should ask themselves "Do you know what profit other traders are making in comparison with your own? What do you intend to do when price cutting starts?" (On that question Mr. Page felt that firms that did not cut prices would survive, whereas the cutters would founder, as Messrs. Bennett had done.) Other questions should be "Do you take a deposit for large reprint orders? How many times do you turn your stock over each year? How much capital is tied up in the business?"

Mr. Page then drew attention to certain future trends, including a new electro-colour process in which colours were electroplated on to a foil backing, producing a print that was brilliant, sharp, waterproof, permanent and



Examining photographic goods after the meeting

durable. Members were able to examine samples of the process later in the meeting. He also mentioned the development of a new low-priced Polaroid camera and added that the film for the camera would cost less. His final example was a machine that had been developed for processing a black-and-white print in fifteen seconds (at an output of about 3,600 prints per hour).

MR. RON STOCK (vice-chairman) proposed a vote of thanks and members were then able to inspect photographic equipment displayed by a local wholesaler.

Pharmaceutical Society

EXAMINERS' REPORTS

THE Privy Council visitors to the examinations held by the boards of examiners for England and Wales and Scotland of the Pharmaceutical Society of Great Britain have issued reports on examinations held during 1965. In England and Wales 635 candidates were examined in the part I examination (in all three subjects 388; in two 59; in one only 178). Of those sitting three subjects, 51.8 per cent. passed in all, 25.8 per cent. in two and 12.9 per cent. in one subject, leaving 9.5 per cent. failures. There were 571 candidates in part II and of 364 sitting all subjects 59.9 per cent. passed in three, 20 per cent. in two, and 14.6 per cent. in only one subject; 5.5 per cent. failed all three subjects. In part III, 425 candidates were examined of whom 293 sat all four subjects. There was a 53.9 per cent. pass in four subjects, 20.1 per cent. in three, 13 per cent. in two, 8.2 per cent. in one subject; 4.8 per cent. failed all four subjects. In Scotland, 105 candidates were examined in part I with 56.2 per cent. passing all three subjects, 22.9 per cent. failing one, 11.4 per cent. failing two, 9.5 per cent. failing all three subjects. Fifty-seven candidates sat part II, 71.9 per cent. passing and 19.3 per cent. failing one subject, 5.3 per cent. two subjects and 3.5 per cent. three subjects. In the final part examination there were sixty-three candidates with a pass of 61.9 per cent., 20.6 per cent. failed one subject, 9.5 per cent. two subjects, 6.4 per cent. three subjects, 1.6 per cent. four subjects.

HOSPITAL DRUG SUPERVISION

Critical comments by Statutory Committee

A DISTURBING feature of a case before the Statutory Committee of the Pharmaceutical Society on March 15 was, in the words of its chairman (Sir Benjamin Ormerod), that members of the staff of the hospital could "come into possession of drugs and indeed became addicted to drugs because of a lack of supervision." The committee was inquiring into a case in which a hospital pharmacist had been convicted of possessing and procuring Dangerous Drugs, and stealing drugs and medicinal preparations from his employers. MR. A. C. CASTLE, in placing the facts before the Committee, said he was satisfied that there had been nothing sinister in the pharmacist's conduct. There was no question of any trafficking in Dangerous Drugs. It was a sad case of a pharmacist who had suffered considerable ill-health and had an obsession that he was suffering from cancer when he was not. The pharmacist had suffered considerable pain due to a physical condition, and had stolen drugs from the hospital to take to relieve it. After hearing evidence from a consultant physician and the pharmacist's counsel, Sir Benjamin ascertained that the pharmacist was willing to give an undertaking that, if the matter was adjourned for twelve months, he would not during that time take any employment "such as being in charge of a pharmacy himself or any employment other than under another pharmacist." It was a further condition that the pharmacist employer should be apprised fully of the facts of the case. "What is the position in this hospital as compared with other hospitals I cannot say," said the chairman. "It may be that some hospitals are very good and others are not good in this respect. . . . Had there been a more regular supervision, audit or examination—call it what you like—of the books, these matters would have come to light earlier and this seems to me to be a very disturbing feature."

Control Problems

Counsel for the pharmacist said "I do not know the results of the police inquiries or recommendations to the Board of Trade, but if you would like me to communicate your views to the Hospital Management Committee I would be delighted to do so." THE CHAIRMAN: The views of the Committee will reach the Home Office, I daresay. MR. CASTLE: Enlarging on what you have already said about the concern of the Committee, in my experience on the staff of the Society this problem is one which more often does not affect the pharmacist so much as other members of the staff, for example nurses, with the rather slipshod system hospitals seem to have, where pharmacists are overruled by other members of the staff when they are trying to be very careful. We often have these problems, with pharmacists telephoning us and saying "I have no control over these drugs—they are distributed all over the hospital and I cannot get them back."

THE CHAIRMAN: "We have that in mind, although we realise that it does not really come within the ambit of our consideration. It is, of course, a fact that hospitals are not subject to the strict inspection and so on to which the retail pharmacist is subject, and it may be that it would be better if they were. But that is at matter of policy on which I am not myself prepared to express an opinion in this capacity."

In those circumstances it was the view of the Committee that the matter should stand over for twelve months.

The Committee also began an inquiry in a case in which a body corporate carrying on business as an authorised seller of poisons was convicted of offences under the Pharmacy and Poisons Act, 1933. The director and superintendent of the company had indicated he would not be able to be present at the hearing. After an inspector of the Society had given evidence to the Committee, Sir Benjamin adjourned the case until the next meeting so as to give the pharmacist a chance to be present. Another case considered by the Committee had been adjourned "a good many times." It had originally been heard in 1964, and then postponed because of the pharmacist's health (he was suffering from deafness and from a cardiac complaint). The matter had been brought before the Committee because the pharmacist had left an unqualified person in charge of the shop. According to a report by an inspector of the Pharmaceutical Society "the pharmacy opens at 9 a.m. and closes daily for lunch interval between 1 and 2.30 p.m.," and the pharmacist said that he attended at the pharmacy between the hours of 10 a.m. and 1 p.m., and 3 p.m. till closing time, normally

6 p.m." That meant that the pharmacy was open for an hour, between 9 and 10, before the pharmacist attended and for half an hour after lunch before he reappeared. Inquiries had been made and it had been ascertained that although elderly the pharmacist was capable of carrying on the business of a pharmacy.

SIR BENJAMIN: "I think I can save your time, Mr. Castle, by saying that the view of the Committee is that this matter should be dismissed . . . but to leave his shop unattended from 9 to 10 every morning is in itself a breach of the Regulations, and if he persists in doing that another complaint will be made against him which may not be treated so leniently. Would you be good enough to ensure that that is brought home to him?"

MR. W. J. TRISTRAM: "The pharmacy should not be open when he is not there!"

THE CHAIRMAN: "If he prefers to attend at 10 rather than at 9 we cannot insist that he should open at 9 and do not wish to, but, on the other hand, if he is not going to be there until 10 the shop should not be open till 10."

MR. CASTLE: "I will ensure that your view is passed on. . . ."

THE CHAIRMAN: "If there is any breach of this sort in the future we cannot go on treating him leniently. We accept that he is a man of good character, and that he is elderly and sick, but, at the same time, if he is running a pharmacy he must run it according to the Regulations."

MR. CASTLE: "And as far as this matter before you at the moment is concerned, no further action will be taken?"

THE CHAIRMAN: "As far as this matter is concerned, we dismiss this complaint, but we do ask you to bring to his attention that if he does not take heed of the matter I have mentioned there will be trouble in the future."

VIRAL VACCINE DEVELOPMENTS

Lecture to Irish students and pharmacists

RECENT developments in the production of the viral vaccines were described by PROFESSOR P. N. MEENAN (professor of medical micro-biology, University College, Dublin), in a lecture given at the College of Pharmacy, Dublin, on March 4. The lecture, organised by the Irish Pharmaceutical Students' Association, was attended by a large gathering of pharmacists and students.

Professor Meenan said that, with one exception—smallpox—chemotherapy of virus diseases was not practicable at present. That was because the intimate contact between the infected cell and the multiplying virus made it difficult to differentiate between them. As a result, vaccines were used that brought about a state of immunity in the recipient, the effect being to put a barrier between the virus and the cells that it must reach to be able to cause disease. The most spectacular use of vaccine in recent years had been in the control of paralytic poliomyelitis. Professor Meenan discussed the essential differences between the Salk and the Sabin vaccines and referred to adjuvant vac-

cines. He described recent work carried out in his department upon measles vaccines.

Proposing a vote of thanks to the lecturer, MR. JOHN HOLLY said it was good to see that the lecture had aroused such widespread interest among students and past pupils of the professor. MR. M. F. WALSH (a member of Council), who seconded, said it was important that pharmacists of the future should know all about vaccines and be able to supply epidemiological information if pharmacies were to be developed as centres of health education.

Mr. D. Hickey (president of the Association) was in the chair.

N.H.S. STATISTICS

IN ENGLAND during December 1965 20,013,365 prescriptions (13,019,652 forms) were dispensed at a total cost of £10,504,402. Average total cost per prescription was 12s.97d. During 1965, 227,288,850 prescriptions (152,200,104 forms) were dispensed. Total cost was £116,766,038 or 12s.3d.

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, MARCH 30: Prices of MENTHOL continued to ease during the week under the influence of forward offers from China. Spot quotations of Brazilian material were reduced to well below replacement levels.

Portuguese ERGOT was down sixpence per lb. in both positions, the Continental variety being similarly reduced. PEPPERS were lower but most other SPICES were unchanged on the week. Italian SQUILL at 125s. per cwt. was down 5s. Supplies of SENEGA were believed to be all taken up and no replacements were expected before new crop arrivals in June-July. Costa Rican IPECACUANHA was one shilling per lb. dearer. Shipment offers were received for STYRAX after an absence of several months, the rate being one shilling a lb. up on the previous nominal spot value. Indian VALERIAN, if available, would be worth 375s. per cwt. (a rise of 25s.). Although the price of HONEY showed little change the market was generally firm following reports of short crops in Australia and Argentina. If any large buying interest was shown it was thought that the price would move ahead fairly rapidly.

In ESSENTIAL OILS Chinese ANISE for shipment was down threepence per lb. and BOIS DE ROSE by the same amount for both spot and shipment. Chinese and Brazilian PEPPERMINTS were also reduced by threepence in both positions. Ceylon CITRONELLA was slightly firmer.

Among PHARMACEUTICAL CHEMICALS the price of TANNIC ACID was dearer by threepence per lb. for the fluffy and by 1s. 3d. for the powder. For the first time in about two years ZINC OXIDE rates changed; 2-ton lots of B.P. grade are now £124 14s. per ton (against £131 10s.).

Pharmaceutical Chemicals

Where material is of foreign origin prices given below may be subject to import surcharge.

ADRENALINE.—(Per gm.). Synthetic B.P., 1-kilo lots, 11d.; 500 gm. is 1s. 1d. ACID CARTRATE, B.P., 1 kilo, 7½d.; 500 gm., 9d.

ANTIMONY SALTS. — CHLORIDE, SOL., B.P.C., 1934, carboys, 5s. 7d. per kilo; FLAKE, 14s. 4d. per kilo.

BACITRACIN.—Sterile topical is 53s. per mega unit for 25 m.u.

BIARIUM SULPHATE. — B.P., 50-kilo lots, 8s. 8d. to 3s. 9½d. as to package; 250-kilos from 3s. 3½d. to 3s. 5d.

BEMEGRIDE.—B.P.C. is 320s. per kilo.

BENZOCAINE.—B.P. is 13s. 2d. per lb. in -cwt. lots.

BROMIDES.—Crystals (per kilo):—

	Under 50 kilos	50 kilos
POTASSIUM*	s. d.	s. d.
...	6 3	5 8
SODIUM	6 3	5 8
AMMONIUM	7 2	6 7

Powder is fourpence per kilo more.

EPHEDRINE.—ALKALOID nominally 6s. 9d. per oz.; SULPHATE, 5s. 9d. and HYDROCHLORIDE, 4s. 9d. per oz.; METHYL EPHEDRINE HYDROCHLORIDE, 388s. kilo.

HOMATROPINE. — 16-oz. lots (per oz.): ALKALOID, 30s. 6d.; HYDROBROMIDE, 4s. 6d.; HYDROCHLORIDE, 28s. 6d.; METHYLBROMIDE, 25s. 6d. 7-oz. rates are 1s. 6d. per oz. above those rates.

OESTRADIOL. — MONOBENZOATE, 14s. 6d. per gm.

PARACETAMOL. — Onc-ton lots are 10s. 2d. per ton.

PENICILLIN. — SODIUM, POTASSIUM OR PROCAINE, 2-25d. per mega for 5,000 megas.

PHENACETIN.—B.P. one-ton lots, 6s. 3d. per lb.; 1-cwt., 6s. 9d.

STREPTOMYCIN. — BASE OR SULPHATE 2-85d. per gm.

UREA. — Pharmaceutical grade, £59 15s. per ton in 1-cwt. bags non-returnable; technical quality, £41 5s. per ton (4-ton lots).

Crude Drugs

AGAR. — Kobé No. 1, 16s. per lb. in bond; shipment, 15s. 9d., c.i.f.

BALSAMS.—(Per lb.): CANADA: nominal, COPAIBA: B.P.C., spot, 14s.; shipment, 13s., c.i.f.; PERU: 20s. 6d., spot; shipment, 19s., c.i.f. TOLU: B.P., from 12s. 6d. to 35s.

CALUMBA.—Mozambique root, 130s. per cwt. spot.

CHAMOMILE. — Belgian flowers, 15s. to 16s. per lb., spot; German type, 7s. 6d.

CINNAMON.—BARK, Seychelles, 165s. cwt. spot; shipment, 115s., c.i.f.; QUILLS, Ceylon (per lb., c.i.f.); Seconds, 9s. 9d.; thirds, 9s. 6d.; quillings, 5s. 9d.; chips, 1s. 9d.

CLOVES. — Zanzibar, standard grade, spot quoted at 2s. 10½d. per lb.; shipment, 2s. 7½d., c.i.f.

COCHINEAL. — (Per lb.). Canary Isle silver-grey, 17s.; forward, 16s. 3d. landed; black-brilliant, 18s. 6d.; forward, 19s. 3d. landed, Peruvian silver-grey, 13s. 6d.

ERGOT. — Portuguese—Spanish, spot, 12s. 6d. per lb.; shipment, 12s., c.i.f., nominal. Continental, 9s., spot.

HONEY. — (Per cwt.). Argentine light amber, spot, 115s to 120s.; and medium amber, 105s. to 110s.; Argentine, 117s. to 122s. 6d.; Canadian, 175s. to 180s.; Mexican spot, 110s. to 115s.

IPECACUANHA. — Matto Grosso for shipment, 54s. per lb., c.i.f. and spot, 55s. Costa Rican, 77s. nominal, spot; shipment, 75s., c.i.f. Colombian, spot, 56s. nominal; shipment not offering.

MENTHOL.—(Per lb.). Chinese for shipment, 28s. 9d., c.i.f.; spot, 30s. in bond; Brazilian for shipment, 34s., c.i.f.; spot, 31s., in bond.

ORANGE PEEL. — Spot: Sweet ribbon, 1s. 8d. per lb., bitter quarters: West Indian, 10½d.; Spanish, 1s. 9d.

PEPPER. — White Sarawak spot quoted at 3s. 10d. per lb.; shipment, 3s. 8½d., c.i.f. Black Sarawak, 3s. 2d., spot; shipment, 2s. 11½d., c.i.f. Black Malabar spot not available, shipment, 350s., c.i.f.

PIMENTO.—Jamaican offered by resellers on spot at 1,100s. per cwt.

PODOPHYLLUM. — Spot per cwt.: Emodi 220s., spot; shipment, 205s., c.i.f.

QUILLAIA.—For shipment, 165s. per cwt. c.i.f.; spot, 165s.

RHUBARB. — Various grades offered at from 5s. to 15s. per lb.

SAFFRON.—Mancha superior, spot, 725s. per lb.; Rio, 700s.

SARSAPARILLA. — Jamaican native red, spot, 3s. 6d. per lb.; shipment, 3s. 3d., c.i.f.

SEEDS. — (Per cwt.). ANISE.—Spanish, 240s.; Turkish, 165s., in bond, 187s. 6d., duty paid. CARAWAY.—Dutch, 167s. 6d., spot. CELERY.—Indian, 165s., spot; shipment, 135s., c.i.f. CORIANDER.—Moroccan, 65s., Rumanian whole seed, 65s. Rumanian splits, 55s., all duty paid; shipment, Moroccan, 62s. 6d., c.i.f., quoted. CUMIN.—Spot, Cyprian, 350s.; Indian, 325s.; Moroccan, 350s., duty paid; Syrian, 335s., duty paid; shipment, Indian, 280s.; Moroccan, 320s., both c.i.f. DILL.—Indian, 130s., spot; shipment, 105s., c.i.f. FENNEL.—Chinese, 130s., duty paid; Indian, 150s.; shipment, Chinese, 112s. 6d., c.i.f.; Indian, 140s., c.i.f. FENUGREEK.—Moroccan, 67s. 6d., duty paid; shipment dealer at 56s., c.i.f. MUSTARD.—English, 72s. 6d. to 95s. according to quality.

STYRAX.—Spot, nominally 19s. per lb.; shipment, new crop, 19s., c.i.f.

TONQUIN BEANS.—Para, spot, 5s. 6d. per lb.; shipment, 5s. 6d., c.i.f.

TRAGACANTH.—Ribbon, No. 1, £175 to £180 per cwt.; No. 2, £160.

TURMERIC. — Madras finger, spot, 125s. per cwt.; shipment, new crop, 112s. 6d., c.i.f.

VALERIAN ROOT.—Indian, spot nominally 375s. per cwt.; shipment not offered. Continental root, 450s. nominal spot; no shipment offers.

VANILLIN.—(Per lb.). 5-cwt. lots, 21s. 6d.; 1-cwt., 21s. 9d.; 56-lb., 22s.; small quantities, 22s. 6d. All plus temporary import surcharge.

WAXES. — (Per cwt.). BEES' — Dar-es-Salaam, 425s., shipment, 405s., c.i.f., Sudanese, spot, 400s., in bond nominal; shipment, 365s., c.i.f. CANDELLILA, spot, 465s.; forward, 460s., landed. CARNAUBA, fatty grey, spot, 280s.; shipment, 250s., c.i.f.; prime yellow spot, 580s.; shipment, 475s., c.i.f.

WITCH HAZEL LEAVES.—Spot quotations are 4s. 3d. per lb. nominal; prompt shipment, 4s., c.i.f.

Essential and Expressed Oils

ALMOND.—Spanish sweet oil is 6s. 9d. per lb. spot.

AMBER.—Rectified on the spot, 1s. 6d. per lb.

ANISE. — Chinese, 9s. 4d., spot, shipment, 8s. 11d., c.i.f.

BOIS DE ROSE.—Brazilian spot, 16s. 6d.; shipment, 16s., c.i.f.

BUCHU.—Spot, from 280s. to 360s. per lb.

CAJUPUT.—Spot from 10s. per lb.

CITRONELLA. — Ceylon, spot, 4s. 4½d.; shipment, 4s. 3d. per lb., c.i.f.; Formosan, 4s. 6d. in bond and 4s. 9d., c.i.f. Chinese, 4s. 5d. in bond; 4s. 3d., c.i.f.

CLOVE.—Madagascar leaf for shipment, 5s. 11d., c.i.f., spot, 6s. 1d. in bond. Rectified, 10s. Distilled bud oil, ENGLISH, B.P., 26s. per lb. for 1-cwt. lots.

LEMONGRASS. — Spot, 25s. per kilo; shipment, 24s. 6d., c.i.f.

PEPPERMINT.—(Per lb.). Arvensis: Chinese for shipment offered at 12s. 6d., c.i.f., and spot, 12s. 6d. Brazilian for shipment, 13s., c.i.f.; spot, 13s. Piperita: Italian spot, 72s.; forward shipment, 82s. 6d. American from 39s. to 49s., as to source.

PETITGRAIN. — Paraguay for shipment, 13s. 9d., c.i.f.; spot, 14s. 3d. per lb.

SANDALWOOD. — Mysore, spot, 108s. per lb. East Indian for shipment, 108s., c.i.f.

SPEARMINT.—American oil on the spot, 63s. to 67s. 6d. per lb. Chinese, 80s. per kilo, c.i.f.

PATENTS

COMPLETE SPECIFICATIONS ACCEPTED From the "Official Journal (Patents)," March 2

- Ultraviolet light absorbing compositions and their use in photographic materials. Eastman Kodak Co. 1,026,142.
- Sulphanylamino-pyridazinone derivatives and their production. Sumitomo Chemical Co., Ltd. 1,026,147.
- Heterocyclic mono-azo compounds and methods for their production. Parke, Davis & Co. 1,026,156.
- Photographic apparatus and photographic device for use therein. International Polaroid Corporation. 1,026,169.
- Photographic method of treating a photographic sheet with a liquid. International Polaroid Corporation. 1,026,170.
- Illuminating means for medical instruments. Welch Allyn, Inc. 1,026,208.
- Compound of the gitoxigenin series. C. F. Boehringer & Soehne, G.m.b.H. 1,026,260.
- Production of esters of cinchophen. Hefa, G.m.b.H. 1,026,280.
- Photographic camera. Agfa, A.G. 1,026,287.
- British patent specifications relating to the above will be obtainable (price 4s. 6d. each) from the Patent Office, 23 Southampton Buildings, Chancery Lane, London, W.C.2, from April 14.

TRADE MARKS

APPLICATIONS ADVERTISED BEFORE REGISTRATION

"Trade Marks Journal," March 16, No. 4568

- For fertilisers (1)
HEMPSALL, B884,162, by N. W. Hempsall, Ltd., Ollerton, Newark, Notts.
- For chemicals and chemical compounds having ultra-violet light absorbing properties for use in industry (1)
GRAESSORB, 886,065, by Aspro-Nicholas, Ltd., Slough, Bucks.
- For preparations for setting the hair (3)
ROSEDALE TIDY SET, 843,880, by Rosedale Products, Ltd., London, E.5.
- For tooth-paste; tooth-powder; shaving soap in tablet, stick, powder and cream form; talcum powder for toilet purposes; perfumed toilet soaps; perfumes; brushless shaving cream (3)
COLGATE CODE 10, 864,204, by Colgate-Palmolive Co., New York, U.S.A.
- For preparations and substances for use as solvents for cleaning purposes; and detergents (not for use in industrial or manufacturing processes) (3)
EPIC, 864,576, by Diversey (U.K.), Ltd., London, W.1.
- For dry cleaning fluid (3)
AMETEK, 869,452, by Ametek, Inc., New York, U.S.A.
- For cosmetics, perfumes and non-medicated toilet preparations (3)
INTERPAN, 872,834, by Diva Laboratorien, A.G., Zurich, 37, Switzerland.
- For cleaning preparations (3)
MULTA CLEAN, B874,463, by David Watt, Cranford, Middlesex.
- For detergents (not for use in industrial or manufacturing processes), none being for use in cleaning milking utensils and apparatus (3)
CIRCUIT, 875,887, by Greenmantle Industries, Ltd., Beckenham, Kent.
- For dentifrices (3)
COLGATE LUSTRE-DENT, 876,798, by Colgate-Palmolive Co., New York, U.S.A.
- For soaps, perfumes, essential oils and cosmetics (3)
CADRE, 877,913, by Ward Distributors (Cosmetics), Ltd., London, S.E.1.
- For preparations (non-medicated) for treating the hair (3)
MADISON PERMSOFT, 881,205, by Charles Alexander & Co., Ltd., West Molesey, Surrey.
- For non-medicated toilet preparations (3)
HALF MOON, 881,696, by Fay Beauty Products, Freckleton, Lancs.
- For perfumes, perfumed sachets, eau de Cologne; non-medicated toilet preparations, cosmetics, non-medicated bath preparations, toilet articles, preparations for colouring the hair, shampoos, perfumed soaps and toilet soaps (3)
CARELESS MOMENTS, 881,873, by Nu-

Tress Laboratories, Ltd., Newcastle-upon-Tyne, 1.

For preparations for the hair (3)
FLOUNCE, 887,378, by Innox (England), Ltd., London, N.1.

For perfumes, non-medicated toilet preparations, cosmetic preparations, dentifrices, depilatory preparations, toilet articles, sachets for use in waving the hair, shampoos, toilet soaps and essential oils, all being goods for sale in the United Kingdom (3) and for deodorants for personal use being goods for sale in the United Kingdom (5)

CHIFFON, 881,998-99, by Cussons Sons & Co., Ltd., Kersal, Manchester, 7.

For perfumes, non-medicated toilet preparations, cosmetic preparations, dentifrices, depilatory preparations, toilet articles, sachets for use in waving the hair, shampoos, soaps and essential oils (3)

YARDLEY SHADE AND LINE, 883,272, by Yardley & Co., Ltd., London, E.15.

For non-medicated mouth washes (3)
PEP TALK, 885,638, by Beauty Counselors of London, Ltd., Newhaven, Sussex.

For preparations and substances for laundry purposes, soaps, detergents (not for use in industrial or manufacturing processes), cleaning preparations and washing preparations, all for domestic purposes, and stain-removing preparations (3)

BIOMAT, 886,463, by Rohm & Haas, G.m.b.H., Darmstadt, Germany.

For disinfectants containing pine extracts (5)
WIMSOL SNOWPINE, 861,095, by Wimsol, Ltd., Keighley, Yorks.

For insecticides, fungicides, larvicides, herbicides and pesticides (5)

HYLOSAN, 873,135, by British Petroleum Co., Ltd., London, E.C.2.

For pharmaceutical preparations and substances (15)

CETIPRIN, 874,849, by A. B. Kabi, Stockholm, Sweden. VARTEF-99, 882,229, by Divapharma, A.G., Zurich, 37, Switzerland. PRIMACTID, 887,838, by Ferring, A.B., Malmö, 9, Sweden.

For chemical preparations for use in medicine and pharmacy, all containing or derived from wool fat (5)

ULTRALANUM, B875,962, by Schering, A.G., Berlin, 65, West Germany.

For pharmaceutical preparations in tablet form for the treatment of diarrhoea, colic and stomach complaints (5)

ENTROTAB, 878,716, by Alexander Laurence Patt, London, N.11.

For pharmaceutical preparations containing vitamins; dietetic foods and food for infants and invalids; but not including medicated wine (5)
MANNAYTE, 879,254, by Molyneux Catering Supplies, Ltd., London, W.1.

For medicinal preparations for the treatment of coughs and colds (5)

VASACOL, 881,921, by Nicholas Proprietary, Ltd., Chadstone, Victoria, Australia.

For pharmaceutical preparations and substances, veterinary preparations and substances, nutritional vitamin preparations for human and veterinary use; yeast and yeast products, all for pharmaceutical and veterinary use; infants', invalids' and dietetic foods (5)

Device, 883,195, by English Grains Co., Ltd., Burton-on-Trent, Staffs.

For pharmaceutical veterinary preparations (5)

UTORET, 882,579, by Willows Francis, Ltd., London, E.8.

For infants' and invalids' foods; disinfectants; preparations for killing weeds and destroying vermin (5)

GRATTANIC, 884,567, by Grattan Warehouses, Ltd., Bradford, 7, Yorks.

For deodorants and anti-perspirants; medicated preparations for the treatment of the scalp and the skin (5)

BEAUTY COUNSELOR, 884,896, by Beauty Counselors of London, Ltd., Newhaven, Sussex.

For pharmaceutical and veterinary preparations (5)
NOLOGAN, 885,509, by Rona Laboratories, Ltd., London, W.C.1.

For mouth washes being medicated (5)
PEP TALK, 885,639, by Beauty Counselors of London, Ltd., Newhaven, Sussex.

For pharmaceutical, veterinary and sanitary preparations and substances (5)

ECONOSONE, 887,952, by Chelsea Drug and Chemical Co., Ltd., London, S.W.5.

For dietetic sweetening agents (5)
NATRENA, 886,505, by Farbenfabriken Bayer, A.G., Leverkusen, Germany.

For apparatus for measuring the alcohol content of the human body (9)
ALCAMETEX, 876,443, by Soberettes, Ltd., Bradford, Yorks.

For cameras and parts and fittings (9)
FUJICA-SINGLE-8, 879,483, by Fuji Shashin Film, K.K., Ashigarakamigun, Kanagawa, Japan.

For orthopaedic instruments and apparatus (10)
COCROMO, 883,406, by Orthopedic Equipment Co., Inc., Bourbon, Indiana, 46504, U.S.A.

For electric hair-driers (not being machines) (11)
THERMOR, B883,675, by Compagnie Thermor, S.A., Orleans (Loiret), France.

For devices for applying preparations to the fingernails (21)
FLOTIP, B880,535, by Chesebrough-Pond's, Ltd., London, N.10.

CONTEMPORARY THEMES

Subjects of contributions in current medical and technical periodicals.

- PURIFIED ASPARAGINASE from guinea-pig serum. Antagonism of, toward lymphoma. *Science*, February 25, p. 998.
- TETRAMISOLE (dl 2,3,5,6-tetrahydro-6-phenyl-imidazo (2,1-b) thiazole hydrochloride—Nilverm) in the treatment of gastrointestinal worms and lungworms in domestic animals. Part 1. Sheep and goats. *Vet. Rec.*, March 19, p. 406.
- INFECTIVE DRUG RESISTANCE in Britain. Observations on. *Vet. Rec.*, March 19, p. 415.
- ACTINOMYCIN D: Inhibition of respiration and glycolysis. *Science*, February 25, p. 1007.
- A NEW PSYCHOACTIVE AGENT IN 1060. Pharmacological investigation of. *Nature*, March 19, p. 1249.
- DICHLORISOPROTERENOL. Paradoxical effect of, on pentobarbital sleep time in hyperthyroid mice. *Nature*, March 19, p. 1250.
- CORTISOL and the immune response. *Nature*, March 19, p. 1254.
- PROBLEMS OF DRUG INTERACTIONS. *J. Amer. pharm. Ass.*, February, p. 62.
- STABILITY OF PHARMACEUTICALS. *J. Amer. pharm. Ass.*, February, p. 73.
- ATOMIC ENERGY AND RADIOACTIVE SUBSTANCES. Legislation and codes of practice. *Atom.*, March, p. 60.
- PHARMACEUTICAL PROMOTION. The effectiveness of, to hospital pharmacists. *Amer. J. hosp. Pharm.*, January, p. 12.
- SHIPPING THERMOLABILE DRUGS AND BIOLOGICALS. Suggested standards for. *Amer. J. hosp. Pharm.*, January, p. 27.
- CLEAR GIL SYSTEMS. *Drug and Cosmetic Ind.*, February, p. 32.
- PATENTS for prolonged action dosage forms. *Drug and cosmetic Ind.*, February, p. 36.
- BISBIGUANIDES. . . . A new series of antimicrobials. *Soap and chem. Specialties*, February, p. 45.
- ORGANIC CHELATING AGENTS. *Soap and chem. Specialties*, February, p. 52.
- JET INJECTION OF INSULIN. *J. Amer. med. Ass.*, March 7, p. 844.
- PROTECTING PLANTS from cold. *New Scientist*, March 24, p. 773.
- PROGESTERONE-IMPREGNATED TAMPONS. Observations on the use of, in a herd of Dorset hill sheep. *Vet. Rec.*, March 26, p. 461.
- DETECTION of cholinesterase-inhibiting insecticide chemicals and pharmaceutical alkaloids on thin-layer chromatograms. *Nature*, March 26, p. 1351.
- COLISTIN-SUI PHONAMIDE SYNERGISM. Antagonism of, by para-aminobenzoic acid. *Nature*, March 26, p. 1357.
- FLUOROACETATE and FLUOROACETAMIDE. Persistence of, in soil. *Nature*, March 26, p. 1367.
- METHYLCHLOROFORM. Acute intoxication with. *J. Amer. med. Ass.*, March 14, p. 904.
- CEPHALORIDINE treatment of gonorrhoea in males. *J. Amer. med. Ass.*, March 14, p. 919.
- THE ESSENTIAL OILS of *Plectranthus incanus* link. Pharmacological study of. *Indian J. Pharm.*, February, p. 31.

NEW COMPANIES

P.C.=Private Company, R.O.=Registered Office

GILCHRISTS (CHEMISTS), LTD. (P.C.).—Capital £100. To acquire the business of dispensing chemists carried on at Dalton-in-Furness, etc. Directors: Margaret Gilchrist and Geoffrey A. Bleackley, M.P.S. R.O.: 75 Market Street, Dalton-in-Furness, Lancs.

LITON'S CHEMISTS, LTD. (P.C.).—Capital £100. To carry on the business of wholesale and retail chemists, etc. Directors: Anthony J. Shelley and Elizabeth M. B. Shelley, 1 Paganel Drive, Dudley, Worcs.

SMALLEY'S WHOLESALE CHEMISTS, LTD. (P.C.).—Capital £100. Directors: John W. J. Morris, M.P.S., Marjorie M. Morris and Noel G. Stow, F.P.S. R.O.: 1 Whiting Street, Wury St. Edmunds, Suffolk.

WACRO CHEMICALS, LTD. (P.C.).—Capital £100. Subscribers: Muriel Goldstein and Brian Goldstein, 25 The Glade, Ilford, Essex.

YALE LABORATORIES, LTD. (P.C.).—Capital £100. To carry on the business of manufacturers of and dealers in chemicals, etc. Directors: Desmond C. Brand, Frances J. Brand and Charles H. Yale. R.O.: Hunter's Moon, Christmas Lane, Farnham Common.

NOTES ON NEW MEDICAMENTS

ESERJIL.—*Chemistry:* 1-(hydroxymethyl)propylamide of 1-methyl-(+)-lysergic acid (approved name methysergide). The drug is the most potent antagonist of serotonin yet available. Serotonin (5-hydroxytryptamine) is present in blood platelets, in brain tissue, and in the intestinal mucosa, and the greater part exists in a bound form. In the free state, the compound exhibits an intense and diverse pharmacological activity, but its exact physiological rôle is still not clear. It may help to regulate peristalsis, and it may function as a neuro-hormonal transmitter in brain tissue. Thus in carcinoid disease (a growth of certain intestinal cells) there is a marked increase in the production and release of serotonin, which may cause severe diarrhoea. Several substances are known which can block the action of serotonin including the ergot alkaloids, lysergic acid diethylamide (LSD), and yohimbine. Some of these serotonin antagonists are not sufficiently selective for clinical use, but a congener of LSD, namely methysergide, inhibits the vasoconstrictor and pressor effects of serotonin, as well as its effects on smooth muscle. The drug appears to be of value not only in the carcinoid syndrome, but also in the prophylactic treatment of migraine. The protective effect of methysergide takes a day or two to develop and treatment for some weeks may be necessary. The drug is of no value in the treatment of the acute attacks of migraine.

ONDAFON.—*Chemistry:* 2-benzosulphonamido - 5 - methoxy - ethoxy - pyrimidine sodium salt. This compound, also known as glymidine, is an orally active hypoglycaemic drug. It differs chemically from the sulphonylurea group of anti-diabetic compounds being derived from sulphapyrimidine. As might be expected from the absence of a para-amino group, the compound has no antibacterial properties. Glymidine is rapidly absorbed and rapidly excreted, and any hypoglycaemic episodes, which are uncommon, are likely to be brief. Breakdown in the body begins with demethylation and the metabolic thus produced is oxidised to form the corresponding carboxylic acid. The demethylated compound has almost as much activity as the parent drug, but the carboxylic acid is virtually inactive. Animal experiments indicate that the drug may stimulate the formation of new insulin-secreting tissue, and clinical work suggests that the main action of the drug is to increase the secretion of insulin and to reduce blood-sugar levels by an augmented uptake and storage of glycogen in the liver. The chemical difference between glymidine and other orally-active hypoglycaemic drugs is reflected in the absence of cross-allergy with the new compound. An exceptionally low toxicity is claimed for the drug.

ONCOVIN.—*Constituent:* Vincristine sulphate, an alkaloid obtained from the periwinkle (*Vinca rosea*). The drug is closely related to the associated alkaloid vinblastine and both alkaloids are representatives of a new class of dimeric compounds containing both indole and dihydro-indole components. The two alkaloids differ only in the replacement of a methyl group by a formyl group. The drugs have an anti-metabolic action and have been used with success in the treatment of a variety of neoplasms, particularly those resistant to other forms of therapy. The mode of action is not yet clear but both drugs cause an arrest of cell division at the metaphase stage. This blockage of the completion of cell mitosis recalls the biological effects of colchicine, and may be connected with the utilisation of glutamic acid by the dividing cells. Experimental work however suggests that although these alkaloids have a very close chemical relationship, the antimitotic actions may not be identical. Certain differences in effect on both clinical and experimental tumours have been noted, and at present vincristine is recommended only for the treatment of acute leukaemia in children. Vinblastine is mainly effective in Hodgkin's disease, and choriocarcinoma resistant to other drugs.

SERENID.—*Chemistry:* 7-chloro-1,3-dihydro-3-hydroxy-5-phenyl-1,4-benzodiazepin-2-one. This drug, also known as oxazepam, is chemically related to chlordiazepoxide and diazepam. It has powerful "anti-anxiety" properties, and is of value in the treatment of patients who show an exaggerated emotional response to stress. Frequently, social and business commitments prevent relief of stress by a change of environment, and treatment must

then be aimed at altering the excessive reaction to such stress. Sedatives have a limited place in such conditions, as therapy must be designed to control the stress symptoms without influencing mental ability or alertness. Unlike the barbiturates, oxazepam and associated drugs act on the midbrain leaving the higher centres unaffected. In that way emotional symptoms to stress may be controlled without loss of response to external stimuli. Modification of the stress reaction is also of assistance in enabling the patient to take an objective view of his stress problem, and thus to participate in his own recovery. Oxazepam is effective in relieving a wide range of stress symptoms, is rapid in action, and has few depressant side effects. Animal experiments suggest that with some other "anti-anxiety" drugs, the side effects become evident at a lower range of dosage.

PRINT AND PUBLICITY PUBLICATIONS

Medical Propaganda
Manufacturers' leaflets, folders, booklets, etc., directed to doctors but available to pharmacists.
FFO LABORATORIES, LTD., Hayes, Middlesex: "Penicals 333" (file card).
MAY & BAKER, LTD., Dagenham, Essex: "Nefrolan . . . for optimum diuresis with minimum discomfort" (4-p. booklet).
WEST-SILTEN PHARMACEUTICALS, LTD., Hove, Sussex: "Ponoxylan ear drops" (file card).
JOHN WYETH & BROTHER, LTD., Taplow, Maidenhead, Berks: "Pregfol . . . prevents anaemia in pregnancy" (6-p. folder). "Serenid . . . the most versatile agent available for the control of all the symptoms of stress" (16-p. booklet).

COMING EVENTS

Items for inclusion under this heading next week should be sent in time to reach the Editor not later than first post on Tuesday, April 5.

Monday, April 4

GUILDFORD BRANCH, PHARMACEUTICAL SOCIETY, Kings Arms hotel, Godalming, at 7.30 p.m. "Retail Pharmacy Management" (lecture series).
LEICESTER AND LEICESTERSHIRE BRANCH, NATIONAL PHARMACEUTICAL UNION, Midland hotel, Princess Road, at 7.45 p.m. Mr. W. Talvan Rees (chairman, N.P.U. Executive) on "Retail Pharmacy and £ s. d."
NORTHAMPTON BRANCH, PHARMACEUTICAL SOCIETY, Coronation room, Wedgwood restaurant, Abington Street, Northampton, at 8 p.m. Annual meeting followed by Miss P. North on "British Poisonous Plants," Parts I and II (recorded lectures).
RUGGATE AND REDHILL PHARMACISTS' ASSOCIATION, St. Mark's hall, Alma Road, Reigate, at 8 p.m. Annual meeting and Mr. T. Reid (a member of Council) on "Planned Distribution of Pharmacies."
STOCKPORT BRANCH, PHARMACEUTICAL SOCIETY, Belgrade hotel, Stockport, at 8 p.m. Dr. H. R. M. Johnson (senior lecturer in forensic medicine, London Hospital Medical College) on "Poisoning—Accident, Suicide or Murder."

Tuesday, April 5

BRITISH PHARMACEUTICAL STUDENTS' ASSOCIATION, School of Pharmacy, Robert Gordon's Institute of Technology, Aberdeen. Annual conference. Until April 9.
CAMBRIDGE AND HUNTINGDON BRANCH, PHARMACEUTICAL SOCIETY, Owen Webb House, Gresham Road, Cambridge, at 8 p.m. Mr. F. J. Turner (Kodak, Ltd.), on "Cine Photography Technique."
DONCASTER AND GOOEIE BRANCH, NATIONAL PHARMACEUTICAL UNION, Danum hotel, Doncaster, at 8.15 p.m. Mr. J. Ferguson (deputy secretary, N.P.U.) on "Private Pharmacy—The Way Ahead." (Members of Mexborough Branch are invited to this meeting.)
PHARMACEUTICAL GROUP LUNCHEON CLUB, ROYAL SOCIETY OF HEALTH, Royal College of Physicians, St. Andrew's Place, London, N.W.1, at 12.30 p.m. Luncheon. Sir John McMichael (professor of medicine, University of London Post-graduate Medical School) on "Drug Testing and Public Safety."

SLOUGH BRANCH, PHARMACEUTICAL SOCIETY, Beech Tree hotel, Beaconsfield, at 8 p.m. Annual meeting.
WORCESTER CITY AND COUNTY BRANCH, PHARMACEUTICAL SOCIETY, Star hotel, Worcester, at 8 p.m. Buffet dance.

Wednesday, April 6

WESTERN PHARMACISTS' ASSOCIATION, Great Western hotel, Paddington Station, London, W.2, at 7.30 p.m. Polaroid Land camera demonstration.

Thursday, April 7

MANCHESTER AND SALFORD BRANCH, PHARMACEUTICAL SOCIETY, Engineers' club, Albert Square, Manchester, at 8 p.m. Annual meeting and discussion of Council resolutions.
NORTH LONDON PHARMACEUTICAL ASSOCIATION, Beale's restaurant, 368 Holloway Road, N.7, at 7.30 p.m. Mr. L. Greenfield on "Pitfalls in Diagnosis, Counter Prescribing and Self-medication."

Advance Information

INTERNATIONAL MEASUREMENT CONGRESS, Warsaw, Poland. July 3-8, 1967.
INTERNATIONAL HOSPITAL EQUIPMENT AND MEDICAL SERVICES EXHIBITION AND MEDICAL EXHIBITION, Olympia, London, W.14. June 5-9, 1967.
PROPRIETARY ARTICLES TRADE ASSOCIATION, Devon room, Connaught rooms, Great Queen Street, London, W.C.2, at 3 p.m. Annual meeting.

Courses and Conferences

INSTITUTION OF ENGINEERING INSPECTION AND MATERIALS AND TESTING GROUP, INSTITUTE OF PHYSICS, AND PHYSICAL SOCIETY. Conference on "The Economics of Automated Materials Testing," Imperial College of Science and Technology, London, S.W.7. July 4-6. Further details should be obtained from the Institution secretary, 616 Grand Buildings, Trafalgar Square, London, W.C.2.
DISTRIBUTIVE TRADES CONFERENCE, Metropole hotel, Brighton, Sussex. May 8-10. Cost including accommodation, meals and Conference fee is £13 13s. Applications should be made to the Conference secretary at National Economic Development Office, 21 Millbank, London, S.W.1.



What doctors are reading about developments in drugs and treatments

"NOT only is aspirin poisoning dangerous, it is likely to occur," say workers in Glasgow in a paper on "Infants, Toddlers, and Aspirin," adding that that thought should be in the minds of doctors, pharmacists and parents. Aspirin causes more accidental deaths in young children than any other drug—more, in fact, than the next four drugs combined—and in pre-school children more deaths are due to faulty therapeutics than to accident. The paper's authors have reviewed the national figures for aspirin poisoning and examined in detail seventy-nine cases in Glasgow, 1963-65. Sixty-seven of the Glasgow cases were accidental, with two deaths, and twelve therapeutic, with six deaths. None of the eight children who died was correctly diagnosed before admission to hospital, and doctors are urged by the writers to consider aspirin poisoning, the cardinal sign of which is hyperventilation. The surest way to eliminate therapeutic aspirin poisoning of infants and toddlers is to withhold the drug entirely. "Salicylates are of real value only in rheumatic fever and rheumatoid arthritis. Tepid sponging is more effective in reducing fever, and chloral is a safe hypnotic. . . . If it is nevertheless decided that aspirin must be given the dose should not exceed gr. 1 (60 mgm.) per year of life five times a day, the dose being calculated in fractions of a year in the young child. It should not be continued for more than two days." (*B.M.J.*, March 26, p. 757.)

A LETTER from workers at Brighton College of Technology pharmacy department presents findings that are held by the writers to show aqueous suspensions of aspirin to be unsuitable for internal use, since they may con-

tain considerable quantities of salicylic acid. Aspirin mixtures were assayed by ultra-violet spectrophotometry and in the B.N.F. mixture salicylic acid was detected within half an hour of preparation. Within a few hours at room temperature the salicylic acid level was found to be above maximum concentration allowed by the British Pharmacopoeia for aspirin tablets. After a week the mixture contained about 20 mgm. of salicylic acid per 15-mil dose and after 10-14 days it contained less than the minimum amount of aspirin permitted by the British Pharmaceutical Codex and more than 30 mgm. per dose of salicylic acid. On their experience that, in retail pharmaceutical practices in the Brighton area, aspirin mixture is "sometimes not freshly prepared" but "made batchwise and stored as either normal or double-strength stock mixtures," they also examined samples obtained from Brighton chemists. Six samples of adult mixtures tested contained an average of 54.5 mgm. of salicylic acid per 15-mil dose; samples of the child's mixture contained an average of 9.6 mgm. per 4-mil dose. (*B.M.J.*, March 26, p. 798.)

PENICILLIN-RESISTANT streptococci are often present in the mouth during treatment with penicillin, and it is perhaps surprising that they do not more often cause endocarditis after dental operations in patients with rheumatic or congenital heart-disease, report workers at Bristol. They examined the saliva of healthy adult out-patients convalescing from rheumatic fever who had received small doses of penicillin for long periods, and of in-patients who had received large doses of penicillin for at least four days. Penicillin-resistant streptococci were rarely found

in the saliva of those not receiving penicillin. Investigation showed that the resistant bacteria were regularly susceptible to vancomycin, erythromycin and cephaloridine, of which the latter was the most rapidly bactericidal. Cephaloridine is said by the writers to be probably the best drug for prophylaxis during dental operations on patients with rheumatic or congenital heart disease who are already receiving, or who are sensitive to, penicillin. (*Lancet*, March 26, p. 686.)

WORLD TRADE

Austria and its Trading Partners.—The new Austrian Government is expected to push hard for an association with the European Economic Community and will subordinate its position in the European Free Trade Association. Dr. Klaus, Austrian Federal Chancellor, whose People's Party won an overall majority in a recent election, stated recently that Austria considers the ratification of a special arrangement with E.E.C. the present most important economic task.

Industrial Development of Arab States.—A call to Arab States for financial help in a Jordanian project to extract potash from the Red Sea was one of sixty-eight resolutions approved by the ten-day conference on industrial development of the Arab States, which ended at Kuwait on March 10. The conference was convened by Kuwait, with the Arab League's approval, to co-ordinate Arab efforts in the field of industrial development. The conference also recommended the Arab countries to encourage establishment of Arab factories to produce pharmaceuticals whenever possible to attain a stage of self-sufficiency in the field of medicines.

WILLS

MR. E. MACMANUS, M.P.S.I., Main Street, Chapelizod, co. Dublin, left £27,081.

MR. C. G. WILLIAMS, M.P.S., 68 Evelagh Road, Farlington, Portsmouth, Hants, left £19,344 (£19,168 net).

MISS M. J. WILSON, M.P.S., 5 Dukes Meadow, Woollington, Northumberland, left £11,400 (£11,346 net).

COMMERCIAL TELEVISION

The information given in the table is of number of appearances and total screen time in seconds. Thus 7/105 means that the advertiser's announcement will, during the week covered, be screened seven times and for a total of 105 seconds.

Period April 10-16	London	Midland	North	Scotland	Wales & West	South	North-east	Anglia	Ulster	Westward	Border	Grampian	Eireann	Channel Is.
PRODUCTS														
Anadin ...	3/90	5/104	4/120	3/90	3/44	2/60	3/90	3/100	4/120	2/60	1/30	4/28	—	—
Anne French cleansing milk	1/30	1/30	1/30	1/30	1/30	1/30	—	—	—	—	—	1/30	—	—
Askit powders ...	—	—	—	7/49	—	—	—	—	—	—	3/21	3/21	—	—
Bisodol ...	—	—	4/28	—	—	—	—	—	—	—	—	—	—	—
Dentu-Creme ...	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	—	1/30
Euthymol tooth-paste ...	1/40	1/30	1/30	—	—	1/30	—	—	1/30	1/30	2/60	1/40	—	—
Gillette Super Silver blades	4/75	4/75	4/75	4/75	3/60	4/75	3/60	4/75	4/75	4/75	5/90	3/60	—	—
Loxene shampoo ...	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	1/30	2/60	1/30	—	—
Moorland indigestion tablets	—	—	1/45	—	—	—	—	1/45	—	—	—	1/45	—	—
Poli-Grip ...	2/60	2/60	2/60	2/60	2/60	2/60	2/60	2/60	2/60	2/60	2/60	2/60	—	2/60
Right Guard ...	3/90	5/150	4/120	6/180	5/150	5/150	5/150	6/180	5/150	5/150	5/150	5/150	—	—
SR tooth-paste ...	3/90	3/90	2/60	2/60	2/60	2/60	1/30	—	—	2/60	2/60	—	—	1/30
Steradent ...	2/60	1/30	2/60	3/90	1/30	—	—	—	1/30	—	1/30	1/30	—	1/30
Sterafix ...	—	1/15	1/15	—	1/15	—	1/15	—	—	—	—	—	—	—
Sunsilk hairspray ...	3/45	2/30	5/75	1/15	3/45	1/15	3/45	3/45	2/30	4/60	5/75	2/30	—	1/15
Valderma balm ...	1/30	2/60	1/30	2/37	2/60	2/60	2/14	1/30	1/30	1/30	—	1/30	2/60	—

mulative price changes

AMENDING C & D QUARTERLY PRICE LIST FOR MARCH 1966

sunflower seed oil				Arriid (235 Carteret)			
1/2 pt	33	7	—	2	4		
(1 1/2 doz)							
1 pt	38	5	—	4	0		
1 qt	37	3	—	7	9		
(1 doz)							
1 gall	72	0	—	30	0		
(1 doz)							
Alphosyl (1178 Stafford)				Ashes of Gardenia (150 Bourjois)			
lotion	8oz	211	0	52	9	30	9
Ambre Sole (525 Golden)				Ashes of Lavender (150 Bourjois)			
home tan aerosol	6oz	86	0	21	6	12	6
Amovon (44 Amovon)				Ashes of Roses (150 Bourjois)			
corn paste	13	8	3	5	2	0	
Amplex (67 Ashe)				Ashes of Violets (150 Bourjois)			
deodorant aerosol	43	1	10	9 1/2	5	11	
Andrews (976 P5&T)				Askit (69 Askit)			
liver salt	4oz	18	9	4	5	2	5
	8oz	32	3	7	8	4	2
	10oz	40	7	9	8	5	3
	8oz	34	5	8	2	4	6
diabetic				D			
Anepidem (802 M5)				Astral (333 Cupal)			
Anne French (655 ICC)				air freshener aerosols			
cleansing milk	16	4	4	1	2	3	
	27	3	6	10	3	9	
	54	6	13	8	7	6	
Anodesyn (147 Boots)				D			
ointment	25gm	32	0	—	4	0	
Anti-Bi-San (451 F&J)				D			
adult's	49	3	12	4	6	6	
child's	37	10	9	5 1/2	5	0	
D				D			
Anti-Kamnia (1178 Stafford) tablets				D			
Apres l'Ondee (548 Guerlain)				D			
toilet water	95cc	—	—	47	0		
	245cc	—	—	84	6		
April Violets (1355 Yardley)				D			
perfumed Cologne	1885	81	0	20	3	11	10
D				D			
D				D			
perfume 1991				D			
perfumed Cologne 1984				D			
Aqua-Net (1524 Chembro)				D			
hair spray squeeze pack	21	0	5	3	2	11	
shampoo sachet				D			
	5	0	1	3	9		
bottle				D			
	21	0	5	3	2	11	
Aqua Roma (342 CWLVD)				D			
shower spray adaptor	—	—	—	63	0		
Aramis (425 ELC)				D			
after shave	4oz	—	—	27	6		
	6oz	—	—	37	6		
	8oz	—	—	47	6		
after shave cream				D			
	1oz	—	—	29	6		
emulsion				D			
	2oz	—	—	29	6		
all weather hand cream				D			
	tube	—	—	27	6		
Ambassador				D			
astringent	6oz	—	—	45	0		
Cologne				D			
	4oz	—	—	27	6		
	8oz	—	—	52	6		
deodorant roll-on				D			
	2oz	—	—	14	9		
spray				D			
	2oz	—	—	17	6		
stick				D			
	2 1/2oz	—	—	21	0		
talc spray				D			
	6oz	—	—	30	0		
eye pads				D			
	—	—	—	30	0		
friction lotion				D			
	6oz	—	—	27	6		
hair groom spray				D			
	6oz	—	—	21	0		
hair stay				D			
	4oz	—	—	19	6		
Mark Out				D			
	1 1/2oz	—	—	27	6		
pick-up mask				D			
	1oz	—	—	42	0		
shampoo-on-a-rope				D			
	—	—	—	27	6		
shaving foam				D			
	6oz	—	—	17	6		
soap bath				D			
	(3)	—	—	50	6		
special shave formula				D			
	6oz	—	—	29	6		
Armyl (61 APC) T5				D			
injection	vial	2	9ea	—	—		

the most versatile digitalis glycoside

LANOXIN brand DIGOXIN

TABLETS • SOLUTION • INJECTION • PÆDIATRIC ELIXIR

BURROUGHS WELLCOME & CO. (The Wellcome Foundation Ltd.) LONDON



Beauty on a Budget (1063 Rimmel)				Cellucon (830 Medo)				injection pituitary (post lobe)			
cream perfume roll-on				tablets				B vet. C. ts4B			
25 9				100 54 0				15mils 34 0			
6 4				250 9 6ea				30mils 50 0			
3 9				—				—			
eyebrow colour brush-on				Chant d'Aromes (548 Guerlain)				injection stilboestrol dipropionate			
18 10				eau de Cologne				B vet. C. ts4B			
12 0				95cc —				15mils 34 0			
25 9				190cc —				30mils 54 0			
eye liner brush				474cc —				—			
12 0				perfume 7cc —				iodine oil (and with methyl sal)			
25 9				15cc —				80oz 53 9ea 13 5 1/2ea			
Hide and Heal				7cc —				vitamin A inj. (vet.)			
cake make-up				toilet water 95cc —				30mils 12 10ea			
12 0				245cc —				vitamin B12 inj. (vet.)			
25 9				—				1000mcgm/ml			
12 0				—				15mils 24 0ea			
lipstick				spray				250mcgm/ml			
Bellafoline (1098 Sandoz)				D Charlton's (249 CM) bait 502				15mils 96 0			
ampoules 1 mil 6				Chloretone (938 PD)				multivitamin inj. (vet.)			
solution 10 mils				inhalant loz & 4oz				100mils 31 8ea			
Bell & Howell (1027 Rank)				with aconite & iodine 2oz				—			
cine cameras Super-8				Chum (967 Petfoods)				halibut oil (vet.) 1 pint			
Optronic Eye 2E				handy 6doz 68 2				hand cream old sizes			
5				large 4doz 82 9				hand lotion old sizes			
—				—				vitamin A capsules 25			
2500 0				Chymacort (61 APC) TS				Croskell's (306 GC)			
Beparon (938 PD) 20 mils				ointment 14-2gm 11 6ea				yellow mixture 6oz 17 3			
Betnesol (518 Glaxo)				Chypre (301 Coty)				16oz 34 0			
ointment 5gm				eau de toilette 013 51 6				8 6			
Betnesol-N (518 Glaxo)				perfume 110-29 126 3				Crystacrin (1282 VB)			
ointment 5gm & 15gm				Clean-O-Matic (551 GI)				hair dressing 24 0			
Betox (978 PYP)				electric toothbrush				Cuticura (993 PD&C)			
extract				battery model 50 7ea				(distributors 885 N&P)			
3oz 14 5				rechargeable model 86 0ea				soap 4 1/2oz 2060			
8oz 33 7				Clinic (509 Gibbs)				14 8			
1lb 57 7				medicated shampoo				3 8			
Bikini (78 A5&Co.)				bottle 18 11				Cycloserine (678 Kabi) TS			
suntan cream				4 9				capsules 250mgm			
Bio (1400 PBI)				2 6				50 68 4ea			
bone meal				500 633 4ea				—			
ctn 2 4ea				Clinistix (843 ML)				Cyclospasmol M (221 Camden)			
7lb 4 4ea				strip test				tablets 100mgm			
14lb 8 4ea				old pack				Damaskin (657 IL)			
—				D				leg make-up tube 21 2			
humus handy 1 8ea				Cobalin (930 P&B)				5 3 1/2			
7lb 3 6ea				insufflation outfit 11 4ea				Daptamycin (894 Nicholas)			
14lb 6 4ea				Collosol (324 Crookes)				Daptazole (894 Nicholas)			
28lb 11 0ea				calamine lotion 4oz 33 0				injection 30mgm 6 22 2ea			
lawn tonic				aurem 2oz				25 79 4ea			
leafshine 2oz 1 8ea				Contrexville-Pavillon (653 I&R)				4 10ea			
plant builder 1 0ea				bottles 36 1				vial 150mgm			
Biocrin (1282 VB)				Coopaphene (295 CM&R)				Decaserpyl (1087 Roussel)			
treatment shampoo				liquid drench 1qt 21 6 1/2ea				tablets 5mgm 20			
30 0				Coopers (295 CM&R)				10mgm 20			
large size				aerosols				Decaspray (837 MSD)			
Biogastrone (117 BPL)				fly killer super				aerosol 30gm			
tablets 25mgm 100				large 76 6				Dekrasil (324 Crookes)			
Blue Grass (60 Arden)				ant killer 38 3				capsules 30 72 0			
soap, bath (3)				Fresh-air super 38 3				Delrosa (976 P5&T)			
hand (3) 748.75				floral 32 9				rose-hip syrup			
hand (3) 749.75				bouquet 32 9				12oz 42 0			
Bourjois (150 Bourjois) existing entry				nocturne 53 3				Delta-Cortelan (518 Glaxo)			
Bourjois (150 Bourjois)				mothproof 38 3				tablets 1mgm 500			
bath cubes, Wild Rose,				border liquid dip†				De-Nol (956 Peptinol)			
Golden Fern				1/2gal 28 0ea				(distributors 1545 Vetric)			
(1 gross) (1 gross)				2 1/2gal 120 0ea				bottle 54 0ea			
Cologne three star				5gal 220 0ea				13 6ea			
9333				dairy ointment				Dentesive (843 ML)			
51 4				2 1/2lb 13 4ea				18 0			
12 10				10lb 46 10 1/2ea				Dento (219 Calvert)			
7 6				poultry aerosol 11 3ea				large 21 4			
lemon hand cream				P.T.Z. drench gun 160 0ea				5 4			
9130				warble fly powder				Dentu-Creme (1178 Stafford)			
9 9				1lb 8 4 1/2ea				large 22 4			
2 5				Coronet (298 Coronet)				5 7			
4 6				camera Coromatic				Digilanid (1098 Sandoz)			
1 9				Coronette (563 Hampshire)				ampoules 2 mils 6 & 30			
1 2				hair lacquer refill 13 3				(distributors 49 AF)			
soaps				existing refill				syrup 4oz 29 6			
eggs				hair styling spray refill				7 4 1/2			
9158				Corsica (960 ADP)				Dimotapp (1071 Robins)			
7 3				cleansing milk				tablets L.A. †			
9258				175cc 8 8ea				Dinky (810 Maw) see under Maws			
36 0				20cc 15 3ea				Diocalm (104 BP)†			
9135				36cc 20 1ea				bottle 42 10			
3 4				20cc 16 0ea				9 11			
10 5				36cc 22 6ea				Dippity-do (1242 Toni)			
toilet				tonic 100cc 6 3ea				hair setting gel regular			
9236				Cortico-Gel (324 Crookes)				or extra holding 41 8			
4 8				80 iu/ml 5mils				9 10 1/2			
9235				Coty (301 Coty)				Distivit (378 Dista)			
18 0				bath cubes 073 41 3				B12 ampoules			
4 6				deodorant roll-on "Correct"				Doidy (122 Bickiepegs)			
2 3				320 51 6				cups 29 6			
10				spray "Correct"				Dor (563 Hampshire)			
bath				321 51 6				deodorant aerosol			
9140				lipstick "24" refill				Dorothy Gray (385 DG)			
6 8				202 39 6				portrait make-up 85 0			
1 8				lipstick "Dew Fresh"				Dulsol Oil (Cadoricin (386 Douek)			
2 6				203 39 6				Easettes (442 Excello)			
1 3				Cravache (Piguet (1253 Turnpenny)				analgesic 13 8			
1 3				toilet water for men				3 5			
1 6				2oz 17 0ea				Easy (509 Gibbs)			
2 9				4oz 27 0ea				shaving stick refill 10 7			
4 11				8oz 39 6ea				2 8			
2 9				16oz 66 6ea				Ecusson (Jean d'Albret (1145 Sirex) existing en			
2 9				32oz 103 6ea				Ecusson (Jean d'Albret (1145 Sirex)			
2 9				Crookes (324 Crookes)				bath oil 443			
2 9				halibut oil (vet.)				444			
2 9				1/2gal 100 0ea				445			
2 9				hand cream 28gm 22 6				Cologne 59			
2 9				114gm 66 0				60			
2 9				57cc 22 6				61			
2 9				114cc 31 6				62			
2 9				lotion				94			
2 9				—				95			
2 9				—				100			
2 9				—				29			
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2 9				—				31			
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74	—	—	28 0	I	Framomycin (324 Crookes) TSVPO	Garlic Plus	144 82 3	20 7	12 6
75	—	—	47 6		injection 100mils 60 0ea	Golden Seal	3 week 68 0	17 0	9 11
440	—	—	14 0		sachets 250mgm		7 week 171 5	42 10	25 0
425	—	—	19 0		100 70 0ea				
452	—	—	28 6		soluble 300gm 150 0ea	Herb Formulas			
453	—	—	39 6		tablets 100mgm 50 15 4ea	'C' catarrh	2 week 51 5	12 10	7 6
411	—	—	52 6		500mgm 50 60 0ea		7 week 140 7	35 2	20 6
412	—	—	80 0		feed additive 15lb 477 0ea				
413	—	—	130 0	D	tablets 200mgm 12 6	'D' digestion	2 week 51 5	12 10	7 6
414	—	—	220 0	D	500mgm 6		7 week 140 7	35 2	20 6
435	—	—	48 6		Framyspray (1530 Fisons) TS				
436	—	—	35 0		aerosol 110gm 29 6ea	'R' rheumatism	2 week 51 5	12 10	7 6
430	—	—	22 6		Freesia (1355 Yardley)		7 week 140 7	35 2	20 6
490	—	—	16 0	I	perfumed Cologne				
Glaxo (518 Glaxo)					1885 81 0	20 3	11 10		
1/2 5gm				D	hair oil 1834				
neomycin 5gm				D	perfume 1891				
ointment 3gm				D	perfumed Cologne				
neomycin 3 1/2 gm					1884 & 1828				
neomycin 1% 20mils					Fresh Start (256 CPL)				
1/2 5gm					cleansing gel 2oz 32 9	8 2	4 6		
neomycin 3 1/2 5gm					Frooty (127 Bioglan)				
Arden (60 Arden)					tablets 100 24 0	—	3 0		
beauty					1000 192 0	—	24 0		
333.66	—	—	23 6		Gabail (49 AF) ts4B				
veiled pressed powder					elixir bromo-val				
compact					40oz 196 0	49 0	27 0		
559.00	—	—	17 9		Gastrinol (956 Peptinol) DDI				
560.00	—	—	7 6		(distributors 1545 Vestric)				
lick interchange					11 3ea	2 10ea	17 6		
ket weave					Germolene (104 BP)				
659.E0	—	—	29 6		tin 19 6	4 6	2 6		
hair cream				D	Gestona (994 P&M) tablets				
933.00	—	—	7 9		Gibbs (509 Gibbs)				
hand 921.00	—	—	7 6		fluoride tooth-paste economy				
tooth 922.00	—	—	10 6		35 11	9 0	4 9		
2 bath 2 hand					Gluco-Fedrin (938 PD)				
906.00	—	—	36 0	D	10mils & 1oz				
travel soap					Glucophage (1077 Rona) ts4B				
921.23	—	—	10 6		tablets 500mgm 50 14 0ea	—	18 6		
liquid cleanser					500 125 0ea	—	—		
202.80	—	—	18 6		1000 230 0ea	—	—		
pruf cream					Golden Babe (761 Lilia-White)				
119.01	—	—	27 9		disposable nappy liners				
301 Coty)					50 26 4	—	2 9		
toilette 013 51 6	12 10 1/2	7 6			Gondafon (973 Pharmaceuticals)				
015 68 9	16 9	10 0			tablets 20 4 6ea	—	6 9		
016 103 3	25 2	15 0			5x20 20 4	—	30 6		
110-40 126 3	31 7	18 9			25x20 95 0	—	142 6		
121-40 218 9	54 8	32 6			Goya (532 Goya)				
141-40 370 3	92 7	55 0			bubble bath large	41 3	10 0 1/2	6 0	
151-40 606 0	151 6	90 0			Cedar Wood				
1 (917 Organon)					hair groom 58 5	14 2 1/2	8 6		
treatment cream					talcum 48 2	11 9	7 0		
tube 30gm 48 0	12 0	7 0				10 10 1/2	6 6		
ar 102 9	25 9	15 0			foam hand cream 44 8				
12 10ea	3 2 1/2ea	22 6			Griptight (1349 LV)				
zette (83 Bancroft)				I	soothers				
ts4B					flat shield, filled 5 8	—	—		
ts4B					teats				
100 50 30 10	7 8	4 6			banded 3 9	—	6		
100 51 5	12 10	7 6			international, small,				
ne and Nembutal (2 Abbott) ts4B					standard or large flow				
ts4B					4 0	—	6		
100 8 3ea	—	12 5			2 6	—	4		
500 33 4ea	—	50 0			valves				
lay (1282 VB)					Guardsman (1136 Silber)				
cream 15 0	3 9	2 3			cine projectors				
Cachet (653 I&R)					Standard 8	—	639 6		
bottles 43 2	6 6	3 3			Super 8	—	659 6		
(1 1/2 doz.)	(1 1/2 doz.)				Guerlain (548 Guerlain)				
36 1	5 5	4 4			base de maquillage hydratante				
Johann Maria (529 Gorney)					tube	—	17 3		
Crest Cologne					beaute d'un soir	—	44 0		
signature (10)	8 4ea	2 1ea	1 6		cleansing cream No. 1	—	15 0		
50055 65 2	16 3 1/2	9 6			No. 2	—	37 3		
50090 102 0	25 6	15 0				—	15 0		
50140 148 0	37 0	22 6				—	37 3		
50180 196 0	49 0	29 6			lotion	—	16 0		
man (930 P&B)						—	29 6		
ts4B	1000 46 0	—	5 9		creme mousseline	—	16 6		
324 Crookes) ts4B					matfilm	—	23 6		
ts4B					skin food Nos. 1-2	—	16 0		
dp250 48 8ea	—	—				—	25 9		
Life (60 Arden)					Halex (560 Halex)				
treatment oil 210.59	—	—	35 0		hairbrushes gents				
(Cadoricin) (386 Douek)					3-piece set D453 47 6	11 11	6 11		
Cut (1156 F5)					hairbrushes ladies				
active fingertip bandage FC7	10 0	—	1 3		Radial brush/comb				
16 (1281 Vincent)					D314 40 6	10 2	5 11		
(distributors 1054 R&A)					ladies brush sets				
Piguet (1253 Turnpenny)					3-piece engine turned				
lotion 30z 34 6	8 9	5 0 1/2			E695 292 0	73 0	42 6		
pume 30z 12 9ea	3 3ea	22 6			3-piece rosewood handle				
30z 30 3ea	7 7ea	53 6			E696 292 0	73 0	42 6		
30z 43 2ea	10 10ea	75 0			coffret Caprice				
30z 61 11ea	15 6ea	108 6			E656 63 0	12 9	8 11		
20z 104 2ea	26 1ea	182 3			toothbrush smoker's				
40z 190 9ea	45 3ea	331 6			A211 24 0	—	3 0		
30z 48 9ea	12 2ea	85 3			bath brush set D632				
30z 73 9ea	18 5ea	129 0			Radial hair brush D376				
20z 123 3ea	30 10ea	215 9			two tone brush set E690				
20z 18 6ea	4 6ea	31 6			Halina (1136 Silber)				
40z 28 0ea	7 0ea	49 0			camera				
80z 44 0ea	10 6ea	73 6			Paulette electric	—	239 6		
160z 72 6ea	18 3ea	127 0			case	—	39 6		
320z 106 0ea	26 6ea	185 0			Healthcrafts (29 Alfonal)				
30z 50 6ea	12 9ea	88 3			Acerosa 100mgm				
30z 3ea	9 0ea	63 0			60 75 5	18 10	11 0		
107 BH&L) all sizes					Anti-Sat capsules				
					32 day 61 9	15 5	9 0		
					Bio-Flora 250 108 0	27 0	15 9		
					Enzygest 100 92 7	23 2	13 0		

	catarrh	2oz	15	0	3	7	2	3		perfume	7cc	—	—	51	0		eau de Cologne						
	children's cough	2oz	15	0	3	7	2	3			15cc	—	—	76	9		116	15	2ea	3	9ea		
	eucalyptus and menthol	2oz	15	0							25cc	—	—	115	0		114	24	4ea	6	1ea		
	Gee's linctus †DDI	2oz	15	0	—		1	10		toilet water	95cc	—	—	47	0		113	36	6ea	9	2ea		
	glycerine, lemon and honey	2oz	14	6	2	1	2	0			245cc	—	—	84	6		5540	29	3ea	7	3ea		
	glycerine thymol	2oz	15	0	—		1	10		Liberty (538 Greebex)							atomiser						
	pholcodine †DDI	2oz	17	6	—		2	3		sunglasses gents	1	36	0	—	4	6	talcum powder	5115	9	1ea	2	4ea	
	lozenges bismuth	1oz	8	6	—					4oz	3	76	0	—	9	6	Margo's (798 Margolis)						
	bismuth dyspepsia	50	16	0	3	10	—			7	24	0	—	3	0		baby powder	14oz	16	6	4	1½	
	C.S. peppermint	2oz	14	6	2	1	2	0		ladies	8	16	0	—	2	0	giant size						
	linseed, liquorice & chlorodyne	51DDI								Liquifruta (1102 Sanitas)							Marigold (35 AR)						
	Mintettes	1oz	5	0	—		8			24oz	24	8	6	2	3	3	rubber gloves						
	peppermint	1oz	5	7	—		10			12oz	47	4	11	10	6	3	new style suedette	450	37	8	3	7½	
	sore throat	2oz	15	0	3	7	2	3		with honey	4oz	26	6	6	7	3	6	Chic	462	30	0	2	11
	lime flavoured sulphur	2oz	10	0	2	4	1	6		medica	4oz	26	6	6	7	3	6	Crepegrip	452	28	0	2	8
	pastilles Friar's balsam									12oz	52	5	13	1	6	11	Featherweight	454	24	6	2	4	
	Jaap's (660 Jaap)									Litto (1282 VB)							General Service						
	health salts	16	6		4	1½	2	2		Cremard ointment	30	0	7	6	4	6	suedette	459	40	6	3	11	
	24 0				6	0	3	2		Patchoid lotion	60	0	15	0	8	9	Handyman suedette	458	30		2	11	
	Jock (1419 RW&S)									Sebacoid lotion	40	0	10	0	6	6	Marina	466	22	6	2	2	
	all meat	small	43	0	—		1	1½		Liu (548 Guerlain)							Smooth	457	24	0	2	4	
	(4 doz.)									eau de Cologne							Marmola (451 F&J)						
	large	39	0	—			2	0½		95cc	—	—	—	40	6		tablets	26	10		6	8½	
	kennel pack	55	8	—			5	10		190cc	—	—	—	62	0		Mavala (664 J&S&C)						
	Johnsons (672 Johnson)									474cc	—	—	—	109	6		lipstick	60	0		15	0	
	crepe bandage B.P.C.									toilet water	95cc	—	—	47	0		Maws (810 Maw)						
	2in	20	6	—			2	2		245cc	—	—	—	84	6		baby powder standard						
	2½in	26	2	—			2	9		L'Origan (301 Coty)							371.01	15	5	3	10		
	3in	30	0	—			3	3		eau de toilette 013	51	6	12	10½	7	6	family	371.02	25	8	6	5	
	3½in	34	6	—			3	9		perfume	110-70	126	3	31	7	18	Milton/Maw unit	328.00	76	0	3	2	
	4in	39	1	—			4	4		121-70	218	9	54	8	32	6	teething balm	345.00	15	5	3	10	
	6in	58	4	—			6	3		141-70	370	3	92	7	55	0	zinc and castor oil cream	337.10	10	0	—		
	cotton wool balls carton									151-70	606	0	151	6	90	0	337.11	18	0	—			
	belladonna plaster on red felt									Louis Philippe (386 Douek)							proprietary eucalyptus oil	417.10	14	3	—		
	June Geranium (60 Arden)									lipstick refill	56	0	14	0	7	9	golden eye ointment	429.00	7	6	1	10½	
	soap, hand (3)									Loxene (563 Hampshire)							baby feeders						
	749.81	—					17	3		hair cream dispenser							dinky polythene						
	748.81	—					25	6		Magic Moments (1227 THP) existing entry							360.02	22	0	—			
	Kalarafill (1282 VB) existing entry									Magic Moments (1227 THP)							360.01						
	Kalarafill (1282 VB)									hair spray aerosol	37	8	9	6	4	11	Max (855 Mondart) existing entry						
	hair food	48	0	12	0	7	6			shampoo cream							Max (1227 THP)						
	Karvol (324 Crookes)									sachet	10	0	2	6	4		aerosols						
	inhalant capsules 10	20	0	5	0	2	11			(4 doz.)	10	0	2	6	4		air freshener 8oz	31	6	—			
	Katkins (967 Petfoods)									2oz	11	4	2	10	1	6	fly killer 8oz	33	9	—			
	6doz	31	5	—						medicated sachet	10	0	2	6	4		Max Factor (813 MF)						
	Kattomeat (1419 RW&S)									2oz	11	4	2	10	1	6	manicure oil	26	0	6	2		
	meat and liver	41	5	—			1	1		Marcel Rochas (796 MR)							10 x 100	65	0	—			
	(4 doz.)									Femme							tablets	100	9	8ea	—		
	Kennomeat (1419 RW&S)									eau de Cologne							Megimide (894 Nicholas)						
	meat and liver	small	43	0	—		1	1½		2206	17	2ea	4	3ea	30	0	ampoules 10mils	6	23	7ea	—		
	(4 doz.)									2204	28	0ea	7	0ea	49	0	25	87	0ea	—			
	large	39	0	—			2	0½		2203	42	0ea	11	0ea	74	0	100mils	18	3ea	—			
	(2 doz.)									atomiser	5240	36	4ea	9	1ea	63	6						
	Kit-E-Kat (967 Petfoods)									parfum	180	28	0ea	7	0ea	49	0						
	6doz	41	1	—							156	36	6ea	9	2ea	64	0						
	Klik (563 Hampshire)										154	53	9ea	13	5ea	94	0						
	fly killer 18oz										153	78	3ea	19	7ea	137	0						
	Kodak (711 Kodak)										152	123	6ea	30	10ea	216	0						
	Instamatic camera "25"										151	188	6ea	47	2ea	330	0						
	29 3ea	7	4ea	52	4						150	228	6ea	57	2ea	400	0						
	Kolantyl (838 MN)										atomiser	595	53	9ea	13	5ea	94	0					
	tablets	240	280	0	70	0	40	10			refill	596	26	10ea	6	9ea	47	0					
	gel	6oz									atomiser	5253	93	6ea	23	4ea	163	6					
	Lacto-Calamine (324 Crookes)										refill	5243	61	6ea	15	4ea	107	6					
	cream	28gm	31	6	7	11	4	2			parfum de toilette												
	lotion	28cc	18	0	4	6	2	4½			2007	19	2ea	4	9ea	33	6						
	talcum powder	105cc	28	0	7	0	4	1			2006	34	3ea	8	6ea	60	0						
	95gm	31	6	7	11	4	2				2004	51	0ea	12	9ea	89	0						
	4oz										2003	88	0ea	22	0ea	154	0						
	L'Aimant (301 Coty)										atomiser	5047	30	4ea	7	7ea	53	0					
	bath cubes	2073	41	3	10	4	6	0			5040	54	4ea	13	6ea	95	0						
	eau de toilette 013	51	6	12	10½	7	6				talcum powder												
	perfume	110-20	126	3	31	7	18	9			1115	12	3ea	3	1ea	21	6						
		121-20	218	9	54	8	32	6			La Rose parfum												
		141-20	370	3	92	7	55	0			480	28	0ea	7	0ea	49	0						
		151-20	606	0	151	6	90	0			456	36	6ea	9	2ea	64	0						
		171-20	967	6	241	10½	147	0			454	53	9ea	13	5ea	94	0						
	Lasix (614 Hoechst) 4B										453	78	3ea	19	7ea	137	0						
	tablets 40mgm	1000	586	0ea	—		879	0			Madame Rochas												
	Lassie (967 Petfoods)										eau de Cologne												
	lindy	6doz	55	7	—						9206	17	2ea	4	3ea	30	0						
	large	4doz	66	2	—						9204	28	0ea	7	0ea	49	0						
	Lavasan (1269 VC)										9203	42	0ea	11	0ea	74	0						
	toilet deodoriser	10	0	—			1	3			atomiser	5940	36	4ea	9	1ea	63	6					
	Layla (1168 S&J)										perfume	995	53	9ea	13	5ea	94	0					
	Layla (1372 CCL)										atomiser	996	26	10ea	6	9ea	47	0					
	Lentheric (753 Lentheric)										refill	9553	93	6ea	23	4ea	163	6					
	lipstick Soft Focus	—					6	3			atomiser	5943	61	6ea	15	4ea	107	6					
	presensation case	—					9	9			refill	980	28	0ea	7	0ea	49	0					
	Le Rouge Baiser (994 P&M)										956	36	6ea	9	2ea	64	0						
	eyeshadow	41	0	10	3	6	0				954	53	9ea	13	5ea	94	0						
	L'Heure Bleue (548 Guerlain)										953	78	3ea	19	7ea	137	0						
	eau de Cologne										952	123	6ea	30	10ea	216	0						
	95cc	—					40	6			951	188	6ea	47	2ea	330	0						
	190cc																						

[illegible]

[illegible]

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Komed (187 B5)		4oz		6oz		8oz		1lb		2lb		4lb		8lb		16lb		32lb		64lb		128lb		256lb		512lb		1024lb		2048lb		4096lb		8192lb		16384lb		32768lb		65536lb		131072lb		262144lb		524288lb		1048576lb		2097152lb		4194304lb		8388608lb		16777216lb		33554432lb		67108864lb		134217728lb		268435456lb		536870912lb		1073741824lb		2147483648lb		4294967296lb		8589934592lb		17179869184lb		34359738368lb		68719476736lb		137438953472lb		274877906944lb		549755813888lb		1099511627776lb		2199023255552lb		4398046511104lb		8796093022208lb		17592186044416lb		35184372088832lb		70368744177664lb		140737488355328lb		281474976710656lb		562949953421312lb		1125899906842624lb		2251799813685248lb		4503599627370496lb		9007199254740992lb		18014398509481984lb		36028797018963968lb		72057594037927936lb		144115188075855872lb		288230376151711744lb		576460752303423488lb		1152921504606846976lb		2305843009213693952lb		4611686018427387904lb		9223372036854775808lb		18446744073709551616lb		36893488147419103232lb		73786976294838206464lb		147573952589676412928lb		295147905179352825856lb		590295810358705651712lb		1180591620717411303424lb		2361183241434822606848lb		4722366482869645213696lb		9444732965739290427392lb		18889465931478580854784lb		37778931862957161709568lb		75557863725914323419136lb		151115727451828646838272lb		302231454903657293676544lb		604462909807314587353088lb		1208925819614629174706176lb		2417851639229258349412352lb		483570327845851669882464lb		967140655691703339764928lb		1934281311383406679529856lb		3868562622766813359059712lb		7737125245533626718119424lb		15474250491067253436238848lb		30948500982134506872477696lb		61897001964269013744955392lb		123794003928538027489910784lb		247588007857076054979821568lb		495176015714152109959643136lb		990352031428304219919286272lb		1980704062856608439838572544lb		3961408125713216879677145088lb		7922816251426433759354290176lb		15845632502852867518708580352lb		31691265005705735037417160704lb		63382530011411470074834321408lb		126765060022822940149668642816lb		253530120045645880299337285632lb		507060240091291760598674571264lb		1014120480182583521197349142528lb		2028240960365167042394698285056lb		4056481920730334084789396570112lb		8112963841460668169578793140224lb		16225927682921336339157586280448lb		32451855365842672678315172560896lb		64903710731685345356630345121792lb		129807421463370690713260690243584lb		259614842926741381426521380487168lb		519229685853482762853042760974336lb		103845937170696552570608552194864lb		207691874341393105141217104389728lb		415383748682786210282434208779456lb		830767497365572420564868417558912lb		1661534994731144841129736835117824lb		3323069989462289682259473670235648lb		6646139978924579364518947340471296lb		1329227995784915872903789468094272lb		2658455991569831745807578936188544lb		5316911983139663491605157872377088lb		10633823966279326983210315744754176lb		21267647932558653966420631489509312lb		42535295865117307932841262979018624lb		85070591730234615865682525958037248lb		170141183460469231731365051916074496lb		340282366920938463462730103832148992lb		68056473384187692692546020766429792lb		136112946768375385385092041532859584lb		272225893536750770770184083065719168lb		544451787073501541540368166131438336lb		1088903574147003083080736332262876672lb		217780714829400616616147266452	
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